

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

DIRECTION NO. 48 OF 2016

DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF COMMERCE (COMPUTER APPLICATION) (BCCA) (CREDIT BASE SEMISTER PATTERN) FACULTY OF COMMERCE

WHEREAS the Maharashtra Universities Act No. XXXV of 1994 has come into force with effect from 22nd July, 1994.

AND

WHEREAS the amendment to the said Act came to be effected from 2016-2017.

AND

WHEREAS the Faculty of Commerce at its meeting held on 14.3.2016 have decided to update and upgrade the existing syllabus for the award of the degree of Bachelor of Commerce (B.Com. (Computer Application)) (BCCA) commensurate with the curricula existing in the various Universities in India and with a view to include the latest trends in the commerce stream as well as to design it to suit to the needs of the industries and corporate houses as provided under Section 38(a) of the Act.

AND

WHEREAS the Coordinator of the Faculty of Commerce concurred with the recommendations of the Special Task Committee in Computer Application in the Faculty of Commerce on 5.4.2016.

AND

WHEREAS the Special Task Committee in Computer Application in its meetings held on 5.4.2016 updated the existing syllabi and recommended some modifications in the scheme of examination for under graduate courses.

AND

WHEREAS the Coordinator, Faculty of Commerce has consented to the changes in the syllabus and the scheme of examination for the award of Bachelor of Commerce (B.Com. (Computer Application)) (BCCA) Degree.



<u>AND</u>

WHEREAS the Vice-Chancellor, Nagpur University, Nagpur approved the recommendations so made by the Special Task Committee in the Faculty of Commerce duly concurred by the Coordinator, Faculty of Commerce as required under Section 38 (a) of the Act.

AND

WHEREAS it is expedient to provide and Ordinance for the purpose of prescribing examinations leading to the degree of Bachelor of Commerce (B.Com. (Computer Application)) (BCCA) in the Faculty of Commerce and phasic repeal of Ordinance No. 21 of 1994 governing the existing course of Bachelor of Commerce (B.Com. (Computer Application))(BCCA).

AND

WHEREAS as per the Advice of the Vice Chancellor, Coordinator, Faculty of Commerce & Coordinator, Special Task Committee (Computer Application) in the meeting held on 24.2.2016 constituted sub-committee for syllabus restructuring of BCCA with Semester pattern.

The Sub-committee submitted the Semester Draft Syllabus of BCCA in meeting held on 5.4.2016.

Now, therefore, I, Dr. S. P. Kane, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 14(8) of the Maharashtra University Act of 1994 do hereby issue the following direction:

This direction shall be called "DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OFBACHELOR OF COMMERCE (COMPUTER APPLICATION) (BCCA)(CREDIT BASE SEMISTER PATTERN) FACULTY OFCOMMERCE".

1. There shall be SIX examinations leading to the degree of B.Com. (Computer Application) (BCCA) namely:

Part-I

- (1) The B.Com. (Computer Application) (BCCA) Semester-I Examination,
- (2) The B.Com. (Computer Application) (BCCA) Semester-II Examination,

Part-II

- (3) The B.Com. (Computer Application) (BCCA) Semester-III Examination,
- (4) The B.Com. (Computer Application) (BCCA) Semester-IV Examination,

Part-III



- (5) The B.Com. (Computer Application) (BCCA) Semester-V Examination,
- (6) The B.Com. (Computer Application) (BCCA) Semester-VI Examination,
- 2. The duration of the Degree Course under this shall be of three academic years. The BCCA Semester I Examination at the end of the first Semester and BCCA Semester II Examination at the end of the Second Semester in First Year and the BCCA Semester III Examination at the end of the Semester III and BCCA Semester IV Examination at the end of Semester IV in Second Year and the BCCA Semester V Examination at the end of the Semester V and BCCA Semester VI Examination at the end of Semester VI in Third Year.
- 3. The Examinations Specified in above paragraph (i.e., Paragraph 2) above shall be held twice a year (Winter + Summer) at such places and on such dates as may be fixed by the University.
- 4. The details of the procedure for admission as well as eligibility for examination of:
 - (A) An applicant of the **BCCASemester I** Examination shall have :

Passed the 12thStandard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with English at Higher or Lower level and any Modern Indian Language at higher or lower level with any combination of optional subjects.

<u>OR</u>

12th Standard Examination of Maharashtra State Board of Secondary and Higher Secondary Education in Vocational Stream with one language only; OR any other examination recognized as equivalent thereto; in such subjects and with such standards of attainments as may be prescribed Minimum Competition vocational course (MCVC).

<u>OR</u>

Any other Equivalent Examination of any State in (10+2) pattern with any combination of subjects.

- (B) An applicant of the **BCCASemester II** Examination shall have : Appeared BCCA Semester I Examination of this University.
- (C) An Applicant of the BCCA Semester-III Examination shall have : Appeared BCCA Semester – I & Semester – II Examination of this University.
- (D) An Applicant of the BCCA Semester-IV Examination shall have : Appeared BCCA Semester – I, Semester – II & Semester – III Examination of this University.
- (E) An Applicant of the BCCA Semester- V Examination shall have :



Passed BCCA Part – I (Semester – I & Semester - II) and appeared BCCA Semester – III & Semester – IV Examination of this University.

(F) An Applicant of the BCCA Semester- VI Examination shall have : Passed BCCA Part – II (Semester – III) and appeared BCCA Part – II Semester – V Examination of this University.

Name of Examination	Candidate should have Passed in following Examinations	Candidate should have Completed the term and filled Examination Form
BCCA Part - I	The Qualifying Examination	
Semester - I	mentioned in Paragraph – 4 (A)	
BCCA Part - I		BCCA Part - I
Semester - II		(Semester – I)
BCCA Part - II		BCCA Part - I
Semester - III		(Semester – II)
BCCA Part - II		BCCA Part - II
Semester - IV		(Semester – III)
BCCA Part - III	Passed BCCA Part – I	BCCA Part - II
Semester - V	(Semester – I &Semester – II)	(Semester – IV)
BCCA Part - III	Passed BCCA Part – II	BCCA Part - III
Semester - VI	(Semester – III)	(Semester – V)

- 5. Without prejudice to the other provisions of Ordinance No. 6 relating to the Examinations in General, the provisions of Paragraphs 5, 7, 8, 10, 26 and 31 of the said Ordinance shall apply to every collegiate candidate.
- 6. The fees for the examination shall be as prescribed by the Management Council from time to time and whenever any change is made in the fees prescribed for any particular examination that shall be notified through a notification for information of the examinees concerned.

With the issuance of this Direction, The Direction No 12 of 2014 shall stand repealed.

Sd/-

Nagpur Dr. S. P. Kane
Date:21.6.2016 Vice-Chancellor



7. Teaching and Examination Scheme

B.Com. (Computer Application) (BCCA)

(A) BCCA Part - I

Semester - I

			_	! . !					Cal				
				eachin heme			Exar	ninatio	on Scr	ieme			
				weeks		Theory				Practical			
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
1CAT1	English – I (Communication Skills)	I	5	-	5	80	20	100	40	-	-	100	4
1CAT2	Financial Accounting	II	5	-	5	80	20	100	40	-	-	100	4
1CAT3	Fundamentals of Computer	III	5	-	5	80	20	100	40	-	-	100	4
1CAT4	Programming in 'C'	IV	5	-	5	80	20	100	40	-	-	100	4
Practica													
1CAP5	Component - I: Fundamentals of Computer Component - II:Programming in 'C'	P-I	-	10	10	-	-	-	-	100	40	100	4
	Total		20	10	30							500	20

Notes:

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 4. The practical shall be treated as a separate passing head.
- 5. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 6. The candidate has to pass theory papers and Practical Paper separately.
- One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.

Viz. Theory - 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

Practical - 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.



- 8. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 9. The odd semester may be scheduled from July to December and even semester from January to June.

(B) BCCA Part-I

Semester - II

			Teaching Scheme per				Exar	ninatio	on Sch	neme			
σ				weeks		Theory				Pract	ical		
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
2CAT1	English – II (Business Communication)	I	5	-	5	80	20	100	40	-	-	100	4
2CAT2	Principles of Business Management	II	5	-	5	80	20	100	40	-	-	100	4
2CAT3	Programming in C++'	Ш	5	-	5	80	20	100	40	-	-	100	4
2CAT4	E-Commerce and Web Designing	IV	5	ı	5	80	20	100	40	-	-	100	4
Practica										1			
2CAP5	Component -I: Programming in 'C++' Component -II: E-Commerce and Web Designing	P- I	-	10	10	-	-	-	-	100	40	100	4
	Total		20	10	30							500	20

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 4. The practical shall be treated as a separate passing head.
- 5. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 6. The candidate has to pass theory papers and Practical Paper separately.



- 7. One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.
 - Viz. Theory 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

 Practical 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.
- 8. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 9. The odd semester may be scheduled from July to December and even semester from January to June.

(C) BCCA Part-II

Semester - III

			Teaching Scheme per										
				weeks			Thec	ry		Pract	ical		
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
3CAT1	Environmental Studies	I	5	-	5	80	20	100	40	-	-	100	4
3CAT2	Business Economics	II	5	-	5	80	20	100	40	-	-	100	4
3CAT3	Visual Basic Programming	III	5	-	5	80	20	100	40	-	-	100	4
3CAT4	Database Management System	IV	5	-	5	80	20	100	40	-	-	100	4
Practica											,		
3CAP5	Component -I :Visual Basic Programming Component – II: Database Management System	P-I	-	10	10	-	-	-	-	100	40	100	4
	Total		20	10	30							500	20

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 4. The practical shall be treated as a separate passing head.



- 5. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 6. The candidate has to pass theory papers and Practical Paper separately.
- 7. One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.
 - Viz. Theory 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

 Practical 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.
- 8. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 9. The odd semester may be scheduled from July to December and even semester from January to June.

(D) BCCA Part-II

Semester - IV

				Teaching Scheme per			Exa	minati	on Sc	heme			
				weeks			The	ory		Pract	ical		
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
4CAT1	Mathematics	I	5	-	5	80	20	100	40	-	-	100	4
4CAT2	Business Law	Ш	5	-	5	80	20	100	40	-	-	100	4
4CAT3	Core Java	III	5	-	5	80	20	100	40	-	-	100	4
4CAT4	PHP & MySQL	IV	5	-	5	80	20	100	40	-	-	100	4
Practica	al												
4CAP5	Component – I :Core Java Component – II : PHP & MySQL	P- I	1	10	10	-	1	1	1	100	40	100	4
	Total		20	10	30							500	20

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 4. The practical shall be treated as a separate passing head.



- 5. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 6. The candidate has to pass theory papers and Practical Paper separately.
- 7. One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.
 - Viz. Theory 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

 Practical 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.
- 8. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 9. The odd semester may be scheduled from July to December and even semester from January to June.

(E) BCCA Part-III

Semester - V

				eachir heme			Exan	nination	Sche	me			
				weeks	•		The	ory		Prac	tical		
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
5CAT1	Computerized Accounting using Tally	I	5	-	5	80	20	100	40	-	-	100	4
5CAT2	VB.Net	Ш	5	-	5	80	20	100	40	-	-	100	4
5CAT3	SEC – I: (i) Management Information Systems (ii) System analysis & Design	III	5	-	5	80	20	100	40	-	-	100	4
5CAT4	DSE-1: (i) Cost & Management Accounting (ii) Corporate Accounting	IV	5	1	5	80	20	100	40	-	•	100	4
Practica													
5CAP5	Component -I: Tally Component - II VB.Net	P-	-	10	10	-	-	-	-	100	40	100	4
	Total		20	10	30							500	20



Notes:

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. SEC = Skill Enhancement Course, DSE = Discipline Specific Elective (DSE) Course.
- 4. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 5. The practical shall be treated as a separate passing head.
- 6. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 7. The candidate has to pass theory papers and Practical Paper separately.
- 8. One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.
 - Viz. Theory 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

 Practical 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.
- 9. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 10. The odd semester may be scheduled from July to December and even semester from January to June.

(F) BCCA Part-III

Semester - VI

				achir eme			Exam	inatio	n Scl	heme			
			weeks				Theory				Practical		
Course Code	Subjects	Paper	Theory (Periods)	Practical (Periods)	Total (Periods)	Max Marks - Theory Paper (TH)	Max Marks - Internal Assessment	Total	Min Passing Marks	Max Marks - Practical (PR)	Min Passing Marks	Total Marks	Credits
Theory													
5CAT1	C#.Net	I	4	-	4	80	20	100	40	-	-	100	4
5CAT2	SEC- II: (i) Python (ii) Ruby on Rail	II	4	-	4	80	20	100	40	-	-	100	4
5CAT3	DSE- II: (i) Entrepreneurship Development (ii) Company Law and Secretarial Practice	III	4	-	4	80	20	100	40	-	-	100	4
Practica			•	1								•	
5CAP4	Component -I : C#.Net Component - II : SEC - II	P-I		6	6	-	-	-	1	100	40	100	4
5CAP5	Project	Proj	-	6	6	-	-	-	-	100	40	100	4



Total	12	12	24				500	20

- 1. Duration of one Theory/Practical period is 48 minutes.
- 2. TH = Theory, PR = Practical, IA = Internal Assessment.
- 3. SEC = Skill Enhancement Course, DSE = Discipline Specific Elective (DSE) Course.
- 4. Minimum passing marks shall be 40 including internal assessment & University theory papers put together.
- 5. The practical shall be treated as a separate passing head.
- 6. Record should be prepared for Practical. Both Components should be included in Practical Record.
- 7. The candidate has to pass theory papers, Practical Paper and Project separately.
- 8. One credit is equivalent to one hour of Teaching or two hours of Practical Work per week.
 - Viz. Theory 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.

 Practical 48 Minutes * 10 = 480 Minutes = 8 Hours i.e. 4 Credits.
- 9. Each semester will consist of 15 18 weeks of Academic Work equivalent to 90 actual teaching days.
- 10. The odd semester may be scheduled from July to December and even semester from January to June.
- 8. In order to pass the examination, an examinee shall obtain not less than 40% marks in each of the theory papers and each of the practical and the project.
 - (A) An examinee who is unsuccessful in the examination shall be eligible for admission to the subsequent examinations on payment of a fresh fee prescribed for the examination together with the conditions of the ordinance in force from time to time.
- 9. (A) The scope of the subjects and pattern of examination shall be as indicated in syllabi.
 - (B) The Medium of instructions and examinations shall be in ENGLISH only.
 - (C) The Maximum/minimum marks which each subject carries&workload inBCCAPart–I (Semester – I & II),Part – II (Semester – III & IV) and Part – II (Semester – V & VI) shall be as indicated in Examination& Teaching Scheme in Paragraph No -7.



- Applicant for B.Com. (Computer Application) (BCCA) Examination prosecuting regular course of study shall not be permitted to join any other course in this or any other University.
- 11. The percentage of passing marks in Theory & Practical shall be as indicated in Examination Scheme mentioned in Paragraph 7.

In order to pass at the B.Com. (Computer Application) (BCCA) Semester - I, Semester - II, Semester - IV, Semester - V and Semester - VI Examinations an examinee shall obtain not less than 40% marks in each subject (Theory / Practical), that is to say jointly in the written subject theory Examination and in internal assessment / Sessional wherever applicable.

12. **ASSESSMENT**

- The final total assessment of the candidates is made in terms of an internal assessment (Sessional) and an external assessment for each course.
- For each paper, 20 marks will be based on internal assessment and 80 marks for semester end examination (external assessment), unless otherwise stated.
- The division of the 20 marks allotted to internal assessment of theory papers should based on class test, attendance, project assignments, seminar, power point presentation, fieldwork, group discussions or any other innovative practice / activity as determined by the teacher in respective subject and moderated by Head of the Institute/Principal.
- There shall be no separate / extra allotment of workload to the concerned teacher.
 He/ She shall conduct the internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.
- At the beginning of each semester, every teacher shall inform his / her students unambiguously the method he / she propose to adopt and the scheme of marking for internal assessment with the prior permission of HOD / principal.
- An unsuccessful examinee at any internal shall be eligible for reexamination on payment of fresh examination fee prescribed by the University as per the respective directions.
- The internal marks will be communicated to the University at the end of each semester, but before the semester end examinations. These marks will be considered for the declaration of the results.



- The record of internal marks, evaluation & result should be maintained for a period of one year by respective institute/college for verification by competent authority.
- The maximum and minimum marks which each subject carries in BCCA Semester
 I, Semester II, Semester III, Semester IV, Semester V & Semester VI
 Examination are as indicated in Paragraph 7. A, B, C, D, E & F respectively.
- A copy of Project work shall be submitted to college prior to commencement of Semester - VI Examination for Evaluation by Internal and External Examiner appointed as per University rules.
- Candidate shall submit his/her declaration that the Project is a result of his/her own
 work and the same has not been previously submitted to any examination of this
 University or any other University.
- The Practical Examination of each Semester will be conducted by Internal and External Examiner appointed as per University rules.
- The old course students shall be absorbed as per the absorption scheme mentioned in Appendix D.

STANDARD OF PASSING

- Every candidate must secure 40% marks in each paper (Theory / Practical).
- There shall be no internal marks in Practical and Project Examination.
- 13. (A) There shall be no classification of examinees successful at the B.Com. (Computer Application) (BCCA) Semester I, Semester II, Semester III, Semester IV, Semester V and Semester VI Examination whereas SGPA will be notified.
 - * Conversion of Marks to Grades and Calculations of SGPA (Grade Point Average) and CGPA (Cumulative Grade Point Average): In the Credit and Grade Point System, the assessment of individual Courses in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by some mechanism wherein the overall performance of the Learners can be reflected after considering the Credit Points for any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

Abbreviations and Formulae Used

G: Grade

GP: Grade Points

C: Credits

CP: Credit Points



CG: Credits X Grades (Product of credits & Grades)

SGPA = \SigmaCG: Sum of Product of Credits & Grades points / Σ C: Sum of Credits points

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designated as GPA)

CGPA: Cumulative Grade Point Average shall be calculated for the entire Programme by considering all the semesters taken together.

After calculating the SGPA for an individual semester and the CGPA for entire programme, the value can be matched with the grade in the Grade Point table as per the ten (10) Points Grading System and expressed as a single designated GRADE such as O, A+, A, B+, B, etc.

Marks	Grade	Grade Points
85 and above	O (Outstanding)	10
75 - 84	A+ (Distinction)	9
71 - 74	A (Very Good)	8
61 - 70	B+ (Good)	7
55 - 60	B(Above Average)	6
50 - 54	C (Average)	5
40 - 49	P (Pass)	4
00 - 39	F (Fail)	0
	AB (Absent)	0

A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

- (B) Division at the B.Com. (Computer Application) (BCCA)Semester VI Examination shall be declared on the basis of the aggregate marks at the BCCASemester - I, Semester - II, Semester-III, Semester- IV, Semester- V and Semester- VI Examination taken together and the CGPA will be calculated and notified.
- (C) Successful examinees at the B.Com. (Computer Application) (BCCA) Semester VI Examination shall be awarded division based on CGPA as follows:

CGPA Range	Final Grade	Equivalent Class/ Division
9.01 to 10.00	0	First Division (Outstanding)
8.01 to 9.00	A+ (Distinction)	First Division(Distinction)
7.01 to 8.00	A(Very Good)	First Division (Very Good)
6.01 to 7.00	B+(Good)	First Division (Good)
5.55 to 6.00	B(Above Average)	Second Division (Above Average)
5.00 to 5.54	C(Average)	Second Division (Average)
4.00 to 4.99	P (Pass)	Pass



0	F (Fail)	Fail
0	AB(Absent)	Absent

- 14. Successful examinees in the B.Com. (Computer Application) (BCCA)Semester Examination shall be awardedDistinction in each subject in which examinees obtain 75% or more marks in that subject at the respective Examination.
- 15. Unsuccessful examinees at the above examinations can be readmitted to the same examination on payment of a fresh fee and such other fees as may be prescribed.
- 16. Provisions of Ordinance No. 3 of 2007 relating to the award of Grace Marks for passing an examination, securing higher division / class and for securing distinction in subject(s) shall be applicable.
- 17. Notwithstanding anything to the contrary in this Direction, no person shall be admitted to an examination under this Ordinance, if he/ she has already passed the same examination or an equivalent examination of any other University.
- 18. Examinees successful at B.Com. (Computer Application) (BCCA) Semester I, Semester - II, Semester-III, Semester- IV, Semester- V and Semester- VI Examination shall on payment of the prescribed fees receive a Degree in the prescribed form signed by the Vice-Chancellor.
- 19. This Scheme shall come into force from the academic session 2016-17.
- 20. The Provisions of Ordinance No. 21 of 1994 governing the existing course for B.Com. (Computer Application) (BCCA) stands repealed physically on implementation of this Direction.



APPENDIX -A

QUESTION PAPER PATTERN

First / Second / Third / Fourth / Fifth / Sixth Semester B.Com. (Computer Application) (BCCA) Examination Choice Based Credit System (CBS)

Subject Name Paper - I

Time: 3 Hours Total Marks: 80

N. B. - a) Draw well labeled diagram wherever necessary.

b) All questions are compulsory.

Part - A

N. B. – 1. Each question carries two marks.

2. Answers should not more than five lines.

Part - B

N. B. – 1. Each question carries three marks.

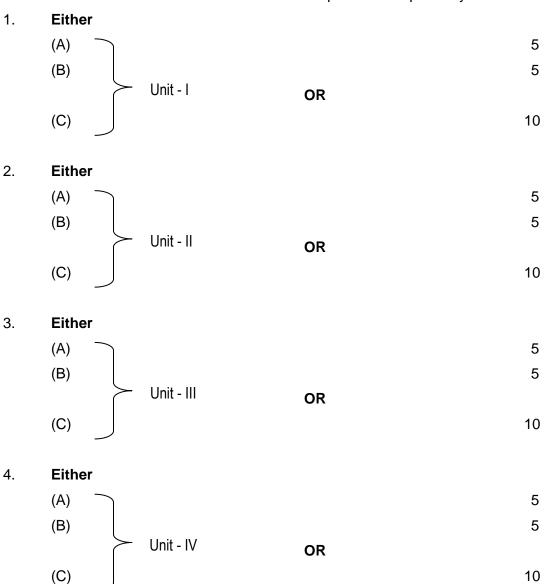
2. Answers should not more than ten lines.



7. Unit - IV

Part - C

- N. B. 1. Each question carries five marks.
 - 2. Answers should not more than 400 words for 5 marks questions and 600 words for 10 Marks questions respectively.





APPENDIX -B

(A) Project and Classification of Marks on Project

Towards the end of the second year of study, a student will be examined in the course "Project Work".

- a. Project Work may be done individually or in groups (Maximum 3 students) in case of bigger projects. However if project is done in groups, each student must be given a responsibility for a distinct module and care should be taken to monitor the progress of individual student.
- b. The Project Work should be done using the tools covered in B.Com. (Computer Application) (BCCA).
- c. The Project Work should be of such a nature that it could prove useful or be relevant from the commercial / management angle.
- d. The project work will carry 100 marks.
- e. Project Work can be carried out in the Institute or outside with prior permission of the Institute.
- f. The external viva-voce examination for Project Work would be held as per the Examination Time Table of the second year of study, by a panel of one external and one Internal Examiner.

Types of Project

As majority of the students are expected to work out a project in some industry/research and development laboratories/educational institutions/software export companies, it is suggested that the project is to be chosen which should have some direct relevance in day-today activities of the candidates in his/her institution. The Applications Areas of project - Financial/Marketing/Database Management System/ Relational Database Management System/E-Commerce /Internet/ Manufacturing/ web Designing / Scientific / ERP etc.

Project Proposal (Synopsis)

The project proposal should be prepared in consultation with the guide. The project guide must be a person having minimum Qualification MCM / M.Sc. (Computer Science + Information Technology) / M.Sc. (Mathematics / Electronics / Statistics / Physics + Post B.Sc. Diploma in Computer Science & Application) / MCA. The project proposal should clearly state the



objectives and environment of the proposed project to be undertaken. It should have full details in the following form:

Format of Synopsis for Desktop Application

- 1. Title of the Project.
- 2. Objectives of the Project.
- 3. Project Category (DBMS/RDBMS/OOPSetc.).
- 4. Tools/Platform and Languages to be used.
- 5. Complete Structure of the System:
 - i. Numbers of Modules and its Description.
 - ii. Modular Chart / System Chart.
 - iii. Data Structures or Tables.
 - iv. Process Logic of each Module.
 - v. Types of Report Generation.
- 6. References.

Note: Synopsis should not be more than 3-4 pages.

Format of Synopsis for Web Application

- 1. Title of the Project.
- 2. Objectives of the Project.
- 3. Project Category (DBMS/RDBMS/OOPSetc.).
- 4. Tools/Platform and Languages to be used.
- 5. Complete Structure of the System:
 - i. Number of pages and links their short description.
 - ii. Use / Information of Pages.
 - iii. Feedback Form (if any).
- 6. References.

Note: Synopsis should not be more than 3-4 pages.

Project Report Formulation

Front Page.

College Certificate Page.

Declaration Page.

Acknowledgment Page.

Project Profile.



Index or Content Page.

i. *Contents ———

Appendices

- i. List Figures, Tables& Charts.
- ii. Approved copy of Synopsis.

Glossary

* Contents.

- i. Introduction.
- ii. Objectives.
- iii. Preliminary System Analysis.
 - Preliminary Investigation.
 - Present System in Use.
 - Flaws in Present System.
 - Need of New System.
 - Feasibility Study.
 - Project Category.
- iv. Software Engineering Paradigm Applied
 - Modules
 - System / Modular Chart.
- v. Software & Hardware Requirement Specification.
- vi. Detailed System Analysis.
 - Data Flow Diagram.
 - Numbers of Modules and Process Logic.
 - Data Structures and Tables.
 - Entity-Relationship Diagram.
- vii. System Design.
 - Form Design.
 - Source Code.
 - Input screen & Output Screen.
- viii. Testing &Validation Checks.
- ix. System Security Measures.
- x. Implementation, Evaluation and Maintenance.
- xi. Future Scope of the project.



- xii. Suggestion & Conclusion
- xiii. Bibliography& References.

Note:-

- A Student is expected to complete the Assignments based on Syllabus of Practical subjects and submit the same in the form of a files (assignment Record) at the end of Academic Session for the evaluation purpose.
- ii. A student should submit internal assessment of each theory paper prescribed by the subject teacher.
- iii. A Student is expected to deliver a seminar on any course curricular subject / latest trends in IT relevant subject per semester for internal assessment.

Classification Of Marks on Project :-

Total Marks	100
Viva voice (Internal)	20
Viva voice (External)	40
Report & Documentation	40

The marks of Project shall be notified as a whole out of 100 in Foil/C-Foil.

(B)Practical and Classification of Marks on Practical

- 1. Practical exam shall be of 4 hours duration.
- 2. The Practical Record of every student shall carry a certificate as shown below, dulysigned by the teacher-in-charge and the Head of the Department.
- 3. If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination and no Marks shall be allotted to the student.
- 4. After Viva-Voce and evaluation of practical records of a student by the Internal & External Examiner, both examiners should sign on the certificate of practical records.
- 5. The certificate template shall be as follows:

Name of the college / Institution Name of the Department:

CERTIFICATE

Th	is is to	certify that M	/lr./Mrs./Ms	·					
of	class	BCCA Part		Semester		has	satisfactorily	completed	the
pra	actical	experiments	prescribed	by Rastra	shant Tuk	doji N	/laharaj Nagpi	ur University	/ fo

the	sub	oject	during	the	academic	year
Signa Prac		In-charge Head of the Departn	Signa n ent	ature		
Signa Interi		kaminer	Signa Exte		aminer	
Date:		ssification Of Practical Marks :-				
		Practical – I	Marks (Component –		Marks	
	1. 2. 3.	Writing a Program or Problem (Algorithm & Flowchart) Execute on a computer Taking Hard Copy	20		20	

Note:

1.

Practical - II

External Viva Voce

Practical Record

Total Marks

Writing a Program or Problem (Algorithm & Program)

• Since the practical contains two components (i.e. two subjects), so each components has to be evaluated as above.

10

10

10

50

+

10

10

10

50

= 100

• Whereas, the marks of Practical shall be notified as a whole out of 100 in Foil/C-Foil.



APPENDIX -C

Absorption Scheme BCCA

It is notified for general information of all concerned that the failure students of **BCCA OldCourse (Annual Pattern)** shall be absorbed in the **New Course CBCS Pattern** introduced from the session 2016-2017 Examination with the following scheme.

- 1) The Failure students of <u>BCCA I, BCCA II and BCCA III</u> as per Old Course (Annual Pattern) appeared in Sum 2016 should clear their backlog papers of BCCA I, BCCA– II and BCCA III Old Course (Annual Pattern) till Winter 2017. If they fail to complete & pass till Winter 2017, then they will have to appear in parallel papers of New Course CBCS Pattern (Choice Based Credit System) as per absorption scheme indicated in Appendix D.
- 2) The Failure students of <u>BCCA II and BCCA III</u> as per Old Course (Annual Pattern) appeared in Sum 2017 should clear their backlog papers of BCCA II and BCCA III Old Course (Annual Pattern) till Winter 2018. If they fail to complete & pass till Winter 2018, then they will have to appear in parallel papers of New Course CBCS Pattern (Choice Based Credit System) as per absorption scheme indicated in <u>Appendix D</u>.
- 3) The Failure students of <u>BCCA III</u> as per Old Course (Annual Pattern) **appeared in Sum 2018** should clear their backlog papers of BCCA III Old Course (Annual Pattern) **till Winter 2019**. If they fail to complete & pass till Winter 2019, then they will have to appear in parallel papers of New Course CBCS Pattern (Choice Based Credit System) as per absorption scheme indicated in <u>Appendix D</u>.
- 4) All the Failure students of <u>BCCA I, BCCA II and BCCA III</u> as per Old Course (Annual Pattern) <u>appeared before Sum 2016</u> should clear their backlog papers of BCCA I, BCCA II and BCCA III Old Course (Annual Pattern) <u>till Winter 2017</u>. If they fail to complete & pass till winter 2017, then they will have to appear in parallel papers of New Course CBCS Pattern (Choice Based Credit System) as per absorption scheme indicated in <u>Appendix D</u>.
- 5) The students, who will appear in parallel papers of New Course CBCS Pattern (Choice Based Credit System) paper with maximum marks 80, will **get proportional marks out**of 100 updated in BCCA I, BCCA II and BCCA III as per Old Course (Annual Pattern) mark sheet.



APPENDIX -D

(A) BCCA Part - I

Old Course (Semester Pattern)→New Course CBCS Pattern (Choice Based Credit System)

	Based Credit System)										
Sr. No	Old Course (Semester Pattern)	M. Marks	Sr. No	New Course CBCS Pattern (Choice Based Credit System)	Max Marks						
Theory			Theory								
1	English & Business Communication	100	2CAT1	English – II (Business Communication)	80						
2	Principles of Business Management	100	2CAT2	Principles of Business Management	80						
3	Financial Accounting	100	1CAT2	Financial Accounting	80						
4	Information Systems	100	1CAT3	Fundamentals of Computer	80						
5	Information Technology	100	2CAT4	E-Commerce and Web Designing	80						
6	Introduction to Operating Systems	100	1CAT4	Programming in 'C'	80						
Pract	tical		Practica	l							
7	Practical-I: Microsoft Office	100	1CMP5	Practical - I : Fundamentals of Computer&Programming in 'C'	100						
8	Practical-II : Operating System	100									



(B) BCCA Part - II

Old Course (Semester Pattern)→New Course Pattern (Choice Based Credit System)

Sr. No	Old Course (Semester Pattern)	M. Marks	Sr. No	New Course CBCS Pattern (Choice Based Credit System)	Max Marks		
Theo	ry		Theory				
1	Statistics & Quantitative Techniques	100	4CAT1	Mathematics	80		
2	Business Economics	100	3CAT2	Business Economics	80		
3	Cost & Management Accounting	100	4CAT2	Business Law	80		
4	Programming Skills (C Prog.)	100	3CAT3	Visual Basic Programming	80		
5	E-Commerce & Web Designing	100	4CAT4	PHP & MySQL	80		
6	MIS & System Analysis	100	3CAT4	Database Management System	80		
Pract	tical		Practica	l			
7	Practical-I : Programming Skills	100	1CMP5	Practical - I :Visual Basic Programming & PHP & MySQL	100		
8	Practical-II: HTML	100					



(C) BCCA Part - III

Old Course (Semester Pattern)→New Course Pattern (Choice Based Credit System)

Sr. No	Old Course (Semester Pattern)	M. Marks	Sr. No	New Course CBCS Pattern (Choice Based Credit System)	Max Marks	
Theo	ry		Theory			
1	Business Law	100	5CAT4	DSE – I: (i) Cost & Management Accounting (ii) Corporate Accounting	80	
2	Computerized Accounting (TALLY)	100	5CAT1	Computerized Accounting using Tally	80	
3	Software Product and Project Management	100	5CAT3	SEC - I: (i) Management Information Systems (ii) System analysis & Design	80	
4	Front End Development	100	5CAT1	C#.Net	80	
5	DBMS and Oracle	100	5CAT2	VB.Net	80	
Pract	ical		Practica			
6	Practical-I : Tally	100	1CMP5	Practical - I :Computerized Accounting using Tally&C#.Net	100	
7	Practical-II : VB & Oracle	100				
Proje	ct		Project			
8	PROJECT	100	5CAP5	Project	100	





RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

"(Established by Government of Central Provinces Education Department by Notification No. 513 dated the 1st of August, 1923 & presently a State University governed by Maharashtra Universities Act, 1994.)"

Directions, Subject Scheme and Syllabus

For

Bachelor of Commerce





RASHTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR

Direction No. 59 of 2016

DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF COMMERCE (CREDIT BASE SEMISTER PATTERN) FACULTY OF COMMERCE

(Issued under section 14(8) of the Maharashtra University Act 1994)

WHEREAS, Maharashtra University act No. xxxv of 1994 has come into force with effect from 22nd July 1994 and has been amended from time to time,

AND

WHERAS, the University Grants Commission, New Delhi vide letter no. D.O. No. F-2/2008/(XI Plan), Dated 31st January 2008 regarding new initiatives under the XI Plan-Academic reforms in the University has suggested for improving quality of higher education and to initiate the Academic reform at the earliest.

AND

WHEREAS, faculty of commerce act its meeting held 14.3.2016 has decided to update the existing syllabus for award of the degree of Bachelor of Commerce commensurate with the curricula existing in the various universities in India and with a view to include the latest trends in the commerce stream as well as to design it to suit to the needs of the industries and corporate houses,

AND

WHEREAS, University Grants Commission, New Delhi has prescribed the Model Curriculum for award of the Bachelor degree in the Faculty of commerce and directed to implement the same from the academic session 2016-2017

AND



WHEREAS, Chairman of all the Board of Studies in the Faculty of Commerce in their meeting held on 5.4.2016 prepared the Scheme of Credit Based Semester pattern for conduct of the BCom. Examination,

AND

WHEREAS, Board of Studies viz. (1) Business Administration and Business Management, (2) Commerce, (3) Accounts and Statistics, (4) Business Economics and (5) Ad-hoc Board in Computer Application in its meetings held on 8.2.2016 respectively updated the existing Syllabi and recommended some modifications in the scheme of examination for graduate courses,

AND

WHEREAS, Coordinator of Task Force, Faculty of Commerce has consented to the changes in the syllabus and the scheme of examination for the award of B.Com Degree,

AND

WHEREAS, the Vice-Chancellor, Nagpur University, Nagpur approved the recommendations so made by the Special Task Committee in the Faculty of Commerce duly concurred by the Coordinator, Faculty of Commerce as required under Section 38 (a) of the Act on

AND

WHEREAS, As per the Advice of the Vice Chancellor, Coordinator, Faculty of Commerce & Coordinator, Special Task Committee in the meeting held on 14.3.2016 constituted subcommittee for syllabus restructuring of B.Com with CBCS pattern.

The Sub-committee submitted the Draft Syllabus of B.Com with CBCS pattern in meeting held on 5.4.2016

AND

WHEREAS, ordinance making involve a time consuming process, Now, therefore, I, Dr. S. P. Kane, Vice-Chancellor, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 14(8) of the Maharashtra University Act of 1994 do hereby issue the following direction:

This direction shall be called "DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF BACHELOR OF COMMERCE (CREDIT BASED SEMESTER SYSTEM) FACULTY OF COMMERCE RASHTRASANT TUKDOJI MAHARAJ NAGPURUNIVERSITY, NAGPUR".

• The Direction shall come into force with effect from the date of its issuance by Honorable Vice-Chancellor.



- The duration of the course shall be of **three** academic years consisting of the **six** semesters with university examination at the end of each semester namely
 - B.Com Semester I Examination
 - B. Com Semester II Examination
 - B. Com Semester III Examination
 - B.Com Semester IV Examination
 - B.Com Semester V Examination
 - B.Com Semester VI Examination

The examination shall be held at such places and on such dates which are notified by the University.

I. ELIGIBILITYTO THE COURSE

- The duration of B. Com. Course shall be of Three years consisting Semester-I &II in first year ,Semester-III &IV in second year and Semester-V &VI in third year
- Subject to compliance with the provisions of this direction and of other ordinances in force from time to time, an applicant for admission to this course shall have passed the XII Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with English at Higher or Lower level and any Modern Indian Language at higher or lower level with any combination of optional subjects;

OR

• XII Standard Examination of Maharashtra State Board of Secondary and Higher Secondary Education in Vocational Stream with one language only; OR any other examination recognized as equivalent thereto; in such subjects and with such standards of attainments as may be prescribed Minimum Competition vocation course (MCVC).

OR

Any other Equivalent Examination of any State in (10+2) pattern with English & any combination of subjects

- The Examinations for Semesters I,II,III,IV, V and VI shall be held twice a year at Such places and on such dates as notified by the University.
- The fees for examination shall be as prescribed by the Rashtrasant Tukdoji Maharaj Nagpur University from time to time.



- Applicant for the examination pursuing the regular course of study leading to the Bachelor Degree in Commerce shall not be permitted to join any other course in this University or any other University simultaneously.
 - ATKT Rules for Admission for the B.Com. Course -An unsuccessful examinee at the any semester examination shall be ALLOWED TO KEEP TERM in accordance to the following table:

Admission to Semester	Candidate should have filled in the examination form of the R.T.M. Nagpur University	Candidate should have passed at least 50% of the passing heads of following examinations
I Semester	As provided eligibility to the course, as above in the direction.	-
II Semester	of semester I	-
III Semester	-	Semester I and II taken together i.e. 6 heads clear
IV Semester	of semester III	-
V Semester	-	Semester I & II all heads clear & semester III & IV together i.e. 6 heads clear
VI Semester	of semester V	-

Note- The consideration of passing heads in respect of all the subjects, including languages, includes the University Theory Examination and Internal Assessment/Practical marks taken together for all subjects.

For providing teaching facility in the subjects of Foundation and Elective Groups minimum requirement of student is 5.

II. CREDIT SYSTEM OF EVALUATION

• The B. COM. programme shall consist of **Thirty Six** Papers/Subjects in old terminology

With the issuance of this Direction, The Direction No 46 of 2016 shall stand repealed.

Sd/-Nagpur: (**Dr. S.P. Kane**)

Dated: 2/9/2016 Vice-Chancellor



Subjects offered, contact hours, credits attached and allocation of marks shall be as follows:

APPENDIX-I

Scheme of teaching and examination under credit based semester system for B.Com Course.

Semester-I

		Internal			Marks		
Course Code	Subjects	/University Exam.	Total Hours	Semester End Exam.	Internal Assessme nt	Total Marks	Credits
1T1	Financial Accounting-I	Uni.	60	80	20	100	4
1T2	Business Organization	Uni.	60	80	20	100	4
1T3	Company Law	Uni.	60	80	20	100	4
1T4	Business Economics-I	Uni.	60	80	20	100	4
1T5	Compulsory English	Uni.	60	80	20	100	4
1T6	Second Language 1T6.1- Supplementary English 1T6.2- Marathi 1T6.3- Hindi	Uni.	60	80	20	100	4.
Total	1		360	480	120	600	24

Note-. Second Language subject of B. Com. Semester ; I, II, III & IV shall be as follows:

A) The syllabus, question paper pattern and question paper of the following subjects:

- 1. Supplementary English, 2. Marathi, 3. Hindi will be as per the Commerce Language Board.
- B) The syllabus, question paper pattern and question paper of the following subjects:

Sanskrit, Urdu, Gujarathi, Telgu, Bengali, Persian, Arebic Pali & Prakrit, Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively.



Vocational Courses: Semester-I

			Examination Scheme					Credits
Course	Subjects	Total Hours	(Uni)	Internal (College)	Practical (Uni)		Total Marks	
Code			Max Marks heory Paper (TH)	Max Marks (IM)	Max Marks actical (PR)	Min Passin Mark	TH. + PR + IM)	
1T7	Entrepreneurship Development	60	80	20	-	40	100	4
1T8	2T8.1- Computer Application-II or 2T8.2- Principles and Practice of Insurance-II or 2T8.3- Advertising, Sales Promotion & Sales Management-II	60	80	20	-	40	100	4



Semester-II

Total			360	480	120	600	24
	2T6.3-						
	2T6.2- Marathi						
	2T6.1- Supplementary English	Uni.	60	80	20	100	4.
2T6	Second Language						
2T5	Compulsory English	Uni.	60	80	20	100	4
2T4	Business Economics-II	Uni.	60	80	20	100	4
2T3	Secretarial Practice	Uni.	60	80	20	100	4
2T2	Business Management	Uni.	60	80	20	100	4
2T1	Statistics and Business Mathematics	Uni.	60	80	20	100	4
Course Code	Subjects	/University Exam.	Total Hours	Semester End Exam.	Internal Assessme nt	Total Marks	Credits
		Internal			Marks		

Note-. Second Language subject of B. Com. Semester; I, II, III & IV shall be as follows:

A) The syllabus, question paper pattern and question paper of the following subjects:

1. Supplementary English, 2. Marathi, 3. Hindi will be as per the Commerce Language Board.

B) The syllabus, question paper pattern and question paper of the following subjects:

Sanskrit, Urdu, Gujarathi, Telgu, Bengali, Persian, Arebic Pali & Prakrit, Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively.



Vocational Courses : Semester -II

				Total	Cre dits			
Cours e Code	Subjects	Total Hours	Theor y (Uni)	Internal (College)	Practica I (Uni)	ssing farks	Marks (TH. + PR + IM)	uits
			Theory Paper	Max Marks (IM)	Marks Practical (PR)	Passing Marks	+ IIVI)	
2T7	Entrepreneurship Development	60	80	20	-	40	100	4
2T8	2T8.1- Computer Application-II or 2T8.2- Principles and Practice of Insurance-II or 2T8.3- Advertising, Sales Promotion & Sales Management-II	60	80	20	-	40	100	4



Semester-III

		Internal					
Course Code	Subjects	/University Exam.	Total Hours	Semester End Exam.	Internal Assessme nt	Total Marks	Credits
3T1	Financial Accounting -II	Uni.	60	80	20	100	4
3T2	Business Communication & Management	Uni.	60	80	20	100	4
3T3	Business Law	Uni.	60	80	20	100	4
3T4	Monetary Economics –I	Uni.	60	80	20	100	4
3T5	Compulsory English	Uni.	60	80	20	100	4
3T6	Second Language 3T6.1- Supplementary English 3T6.2- Marathi 3T6.3- Hindi	Uni.	60	80	20	100	4.
Total	1 1111101	1	360	480	120	600	24

Note-Second Language subject of B. Com. Semester; I, II, III & IV shall be as follows:

A) The syllabus, question paper pattern and question paper of the following subjects:

- 1. Supplementary English, 2. Marathi, 3. Hindi will be as per the Commerce Language Board.
- B) The syllabus, question paper pattern and question paper of the following subjects:

Sanskrit, Urdu, Gujarathi, Telgu, Bengali, Persian, Arebic Pali & Prakrit, Latin will be as per the Boards of the faculty of Arts for B.A. Semester- I, II, III & IV respectively.



Vocational Courses : Semester-III

				Examinatio	n Scheme			Credits
Cour se	Subjects	Total Hours	Theor y (Uni)	Internal (College)	Practical (Uni)		Total Marks (TH. +	
Code		Total Index Index Paper (TH)	Max Marks Theory Paper (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks (MI + N4	PR + IM)	
3T7	Entrepreneurship Development	60	80	20	-	40	100	4
	3T8.1- Computer Application-II or 3T8.2- Principles and Practice of Insurance-II or 3T8.3- Advertising, Sales Promotion & Sales Management-II	60	80	20	-	40	100	4



Semester-IV

		Internal			Marks		
Course Code	Subjects	/University Exam.	Total Hours	Semester End Exam.	Internal Assessme nt	Total Marks	Credits
4T1	Financial Accounting -III	Uni.	60	80	20	100	4
4T2	Skill Development	Uni.	60	80	20	100	4
4T3	Income Tax	Uni.	60	80	20	100	4
4T4	Monetary Economics-II	Uni.	60	80	20	100	4
4T5	Compulsory English	Uni.	60	80	20	100	4
4T6	Second Language 4T6.1- Supplementary English 4T6.2- Marathi 4T6.3- Hindi	Uni.	60	80	20	100	4.
Total	1		360	480	120	600	24

Note-1. For rest of Indian Languages the code is as per syllabus of B.A. Semester -I

2. Second Language subject of B. Com. Semester ; I, II, III & IV shall be as follows:

A) The syllabus, question paper pattern and question paper of the following subjects:

- 1. Supplementary English, 2. Marathi, 3. Hindi will be as per the Commerce Language Board.
- B) The syllabus, question paper pattern and question paper of the following subjects:

Sanskrit, Urdu, Guajarati, Telgu, Bengali, Persian, Arabic Pali & Prakrit, Latin will be as per the Boards of the faculty of Arts for B.A. Semester-I, II, III & IV respectively.



Vocational Courses : Semester-IV

			I	Examinatio	n Scheme			Credits	
Cours	Subjects	Hours	Theory (Uni)	Internal (College)	Practical (Uni)		Total Marks (TH. +		
Code	ode	Total	Total Hours	Max Marks Theory Paper (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks	PR + IM)	
4T7	Entrepreneurship Development-IV	60	80	20	-	40	100	4	
4T8	4T8.1- Computer Application-IV or 4T8.2- Principles and Practice of Insurance-IV Or 4T8.3- Advertising, Sales Promotion and Sales Management-IV	60	80	20	-	40	100	4	



Semester-V

					Marks		
Course Code	Subjects	Internal /Uni. Examinat ion	Total Hours	Semester End Exam.	Internal Assessm ent	Total Marks	Credits
5 m 1	Core Group						
5T1	Financial Accounting- IV	Uni.	60	80	20	100	4
5T2	2.Cost Accounting	Uni.	60	80	20	100	4
5T3	3.Management Process4. Indian Economics- I	Uni.	60	80	20	100	4
5T4		Uni.	60	80	20	100	4
5T5	Elective Group –I 5T5.1 Marketing Management OR 5T5.2 Computerized Accounting	Uni.	60	80	20	100	4
5T6	Foundation Group- I 5T6.1 Business Finance -I OR 5T6.2 Auditing	Uni.	60	80	20	100	4
	Total		360	480	120	600	24



Vocational Courses : Semester-V

				Examinatio	n Scheme			Credits
Course	Subjects	lours	Theory (Uni)	Internal (College)	Practical (Uni)		Total Marks (TH. +	
Code	Subjects	Total Hours	Max Marks Theory Paper (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks	PR + IM)	
5T7	Entrepreneurship Development-V	60	80	20	-	40	100	4
5T8	5T8.1 Computer Application-V Or 5T8.2 Principles and Practice of Insurance-V Or 5T8.3 Advertising, Sales Promotion and Sales Management-V	60	80	20	-	40	100	4



Semester-VI

					Marks	T	
Course Code	Subjects	University Examination	Total Interna l /Hours	Semester End Exam.	Internal Assessm ent	Total Marks	Credits
	Core Group						
6T1	1. Financial Accounting -V	Uni.	60	80	20	100	4
6T2	2.Management Accounting	Uni.	60	80	20	100	4
6T3	3.Advanced Statistics	Uni.	60	80	20	100	4
6T4	4. Indian Economics - II	Uni.	60	80	20	100	4
6T5	Elective Group-II 6T5.1 Human Resource Management OR 6T5.2- Indirect Tax	Uni.	60	80	20	100	4
6T6	Foundation Group- II 6T6.1 Business Finance - II OR 6T6.2 Industrial Law	Uni.	60	80	20	100	4
	Total		360	480	120	600	24



Vocational Courses: Semester-VI

				Examinatio	n Scheme			Credits
Course	Subjects	Iours	Theory (Uni)	Internal (College)	Practical (Uni)		Total Marks (TH.	
Code	Total H	Total Hours	Max Marks Theory Paper (TH)	Max Marks (IM)	Max Marks Practical (PR)	Min Passing Marks	+ PR + IM)	
6T7	Entrepreneurship Development-VI	60	80	20	-	40	100	4
6T8	6T8.1 Computer Application-VI Or 6T8.2 Principles and Practice of Insurance-VI Or 6T8.3 Advertising, Sales Promotion and Sales Management-VI	60	80	20	-	40	100	4



III Choice of Vocational Courses:

Apart from doing General B.Com, students can opt for vocational courses in B. Com as under:

• *Vocational subjects:* The various vocational courses (mainly sponsored by UGC) which can be chosen by the students are given below. As per the UGC letter no. F.9-3/95 (Desk-VE) dated 23.12.1999 a course for **Entrepreneurial Development is compulsory** for students opting for vocational subjects. Thus with every vocational subject there will be one paper of Entrepreneurship Development.

Group –I - Computer Applications

- I. Entrepreneurship Development- Paper-I
- II. Computer Applications
- (2 papers in each year i.e. 6 papers in 3 years)

Group -II - Principles and Practice of Insurance

- I. Entrepreneurship Development- Paper-I
- II. Principles and Practice of Insurance
- (2 papers in each year i.e. 6 papers in 3 years)

Group -III - Advertising, Sales Promotion And Sales Management

- I. Entrepreneurship Development- Paper-I
- II. Advertising, Sales Promotion And Sales Management
- (2 papers in each year i.e. 6 papers in 3 years)

NOTE:

Students opting for UGC Vocational subject (any one group of the two mentioned above) may select the same in lieu of following mentioned subjects in the respective Semester.

B.Com. Semester-I:

- a. Second Language subject i.e. Hindi, Marathi, Supp. English, etc.
- b. Company Law

B.Com. Semester-II:

- a. Second Language subject i.e. Hindi, Marathi, Supp. English, etc.
- b. Secretarial Practice

B.Com. Semester-III:

- a. Second Language subject i.e. Hindi, Marathi, Supp. English, etc.
- b. Business Communication and Management

B.Com. Semester-IV:

- a. Second Language subject i.e. Hindi, Marathi, Supp. English, etc.
- b. Skill Development

B.Com. Semester-V:

- a. Core Group-I
- b. Elective Group-I

B.Com. Semester-VI:

- a. Core Group-II
- b. Elective Group-II



Summary of the Total Marks and Credits

<u>Sr.</u> <u>No.</u>		Instruction Hours	Total Marks) Semester End Exam.	Credits
1	Semester-I	360	600	24
2	Semester-II	360	600	24
3	Semester-III	360	600	24
4	Semester-IV	360	600	24
5	Semester-V	360	600	24
6	Semester-VI	360	600	24
	Total	2160	3600	144

[•] The Semester End written examination of all subjects shall be conducted by the University.

B.COM. Examination Semester–I

Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks (Combined)
	University Theory Examination	80	
1. Financial Accounting – I	Internal Assessment	20	
	Total	100	40
	University Theory Examination	80	
2. Business Organization	Internal Assessment	20	
	Total	100	40
	University Theory Examination	80	
3. Company Law	Internal Assessment	20	
	Total	100	40
	University Theory Examination	80	
4.Business	Internal Assessment	20	
Economics-I	Total	100	40
5. Compulsory	University Theory Examination	80	
English	Internal		
	Assessment	20	



	Total	100	40
	University Theory Examination	80	
6. Second Language	Internal Assessment	20	
	Total	100	40
Total	600	240	

B.COM. Examination Semester–II

Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks (Combined)
1. Statistics & Business	University Theory Examination	80	
mathematics	Internal Assessment	20	
	Total	100	40
Business Organization	University Theory Examination	80	
	Internal Assessment	20	40
	Total	100	
3. Company Law	University Theory Examination	80	
	Internal Assessment	20	
	Total	100	40
4. Business	University Theory Examination	80	
Economics-II	Internal Assessment	20	40
	Total	100	
5. Compulsory	University Theory Examination	80	
English	Internal Assessment	20	
	Total	100	40
	University Theory Examination	80	
6. Second Language	Internal Assessment	20	
	Total	100	40
Total		600	240



B..COM. Examination Semester-III

1. Financial Accounting -II	Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks
Internal Assessment 20 Total 100 40		University Theory		(Combined)
2. Business Communication and Management		Internal	20	-
Theory Examination 80		Total	100	40
Assessment 20		Theory	80	
10tal 10ta			20	40
Theory Examination 80			100	40
Assessment 20	3. Business Law	Theory Examination	80	
4.Monetary			20	
Theory 80		Total	100	40
Assessment 20		Theory Examination	80	
5. Compulsory English Theory Examination Internal Assessment Total University Thoory Examination Internal Assessment Internal Internal Internal Internal	Economics-1		20	
5. Compulsory English Theory Examination Internal Assessment Total University Theory Examination 80 University Theory Examination Internal Internal		Total	100	40
Assessment 20 Total 100 40 University Theory 80 Examination Internal		Theory	80	
6.Second Language University Theory Examination Internal	English		20	
6.Second Language Theory 80 Examination Internal		Total	100	40
	6.Second Language	Theory	80	
1		Assessment	20	40
Total 100 Total 600 240	Total	TOLAI		240



B..COM. Examination Semester–IV

Paris Examination Semester 19		Maximum	Minimum Passing
Subject	Examination Scheme	Marks	Marks (Combined)
Financial Accounting –	University		(Comomed)
III	Theory	80	
	Examination Internal		
	Assessment	20	
			40
0 01 11 D 1	Total	100	40
2. Skill Development	University Theory	80	
	Examination Internal		
	Assessment	20	
	Tissessificit		40
	Total	100	-
	University Theory		
	Examination	80	
3. Income Tax	Internal		
	Assessment	20	
	Total	100	40
	University Theory		
4.Monetary	Examination	80	
Economics-II	Internal		
	Assessment	20	
	Total	100	40
	University Theory		
5. Compulsory	Examination	80	
English	Internal		
-	Assessment	20	
	Total	100	40
	University		
	Theory Examination	80	
6.Second Language	Internal		
	Assessment	20	
	Total	100	40
Total	600	240	



B.COM. Examination Semester–V

Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks (Combined)			
Group 1. Financial Accounting-IV	University Theory Examination	80				
	Internal Assessment	20	40			
	Total	100				
2.Management Accounting	University Theory Examination	80				
	Internal Assessment	20	40			
	Total	100	_			
3.Management Process	University Theory Examination	80				
	Internal Assessment	20	40			
	Total	100				
4. Indian Economics- I	University Theory Examination	80				
	Internal Assessment	20	40			
	Total	100				
5. Elective Group-I	University Theory Examination	80	40			
Marketing Management OR	Internal Assessment	20				
Computerized Accounting.	Total	100	-			
6. Foundation Group- I Business Finance -I	University Theory Examination Internal	80	40			
OR Auditing	Assessment	20	_			
Total	Total	100 600	240			
Total		บบบ	24U			



B.COM. Examination Semester-VI

Subject	Examination Scheme	Maximum Marks	Minimum Passing Marks (Combined)		
Group 1.Financial Accounting -V	University Theory Examination	80			
	Internal Assessment	20	40		
	Total	100			
2.Cost Accounting	University Theory Examination	80			
	Internal Assessment	20	40		
	Total	100			
3. Advanced Statistics	University Theory Examination	80			
	Internal Assessment	20	40		
	Total	100			
4. Indian Economics-II	University Theory Examination	80			
	Internal Assessment	20	40		
	Total	100			
3. Elective Group-II Human Resource	University Theory Examination	80	40		
Management OR Indirect Tax	Internal Assessment	20			
	Total	100			
4. Foundation Group- II Business Finance –II OR	University Theory Examination	80	40		
Industrial Law	Internal Assessment	20			
	Total	100			
Total		600	240		



APPENDIX-II

I. GENERAL RULES AND REGULATIONS

The scope of the subject, percentage of passing in theory will be governed as per following rules:

- In order to pass at the Semester I, II, III & IV examinations an examinee shall obtain not less than 40% marks in each paper. This is to say that out of total 100 marks student should score 40 marks jointly in university examination (80 Marks) and internal examination (20 marks).
- The results of successful candidates at the end of semester-VI shall be classified on the basis of aggregate marks obtained in all the six semesters.
- The candidates who pass all the semester examinations in the first attempt are eligible for ranks.
- The results of the candidates who have passed the Semester-VI examination but not passed the lower semester examinations shall be declared as NCL (not completed lower semester examinations). Such candidates shall be eligible for the Degree only after successful completion of all the lower semester examinations.
- Percentage of marks for declaring class:

Distinction- 75% and above (First Class With Distinction).

First Class- 60% and above

Second Class 45% and above but less than

60%.

Third Class 40% but not less than 45%

• An unsuccessful examinee at the any semester wise end examination shall be eligible for reexamination on payment of a fresh Examination fee prescribed by the University.

II.TEACHING NORMS FOR THEORY PAPERS

- For all Theory Papers there shall be **FIVE Periods Per week per Subject of 48 Minutes duration** each. Each Theory Paper must cover minimum 60 Clock Hours of Teaching and 360Clock Hours for semester I, II, III IV, V & VI form awl the 6 papers and One Credit, subject of Theory will be of 1 Clock Hour
- No person shall be admitted to this Programme, if he has already passed the same Programme or an Programme of any other statutory University (which has been recognized as equivalent to this programme.)
- A candidate who fails in any of the semester examinations may be permitted to take the
 examinations again at a subsequent appearance as per the syllabus and scheme of



examination in vogue at the time the candidate took the examination for the first time. This facility shall be limited to the following two years i.e. 4 more attempts.

- Examinee successful at the Semester I, II, III, IV, V and VI examinations shall, on payment of the prescribed fee, receive a Degree in the prescribed form signed by the Vice-Chancellor.
- Qualification of Teacher shall be as per U.G.C. and State Government norms.

APPENDIX- III Rashtrasant Tukdoji Maharaj Nagpur University

I. SUBJECTS FOR B.Com. EXAMINATION

Semester-I

1. 1T1-Financial Accounting-I
2. 1T2- Business Organization
3.1T3 Company Law
4. 1T4 Business Economics –I
5.1T5 Compulsory English
6.1T6 Second Language

Semester-II

1. 2T1 Statistics and Business Mathematics			
2. 2T2 Business Management			
3. 2T3 Secretarial Practice			
4. 2T4 Business Economics –II			
5.2T5 Compulsory English			
6.2T6 Second Language			

Semester-III

1. 3T1 Financial Accounting-II
2. 3T2 Business Communication and Management
3. 3T3 Business Law
4. 3T4 Monetary Economics –I
5.3T5. Compulsory English
6. 3T6 Second Language



Semester-IV

1. 4T1 Financial Accounting-III
2. 4T2 Skill Development.
3. 4T3 Income Tax
4. 4T4 Monetary Economics –II
5. 4T5 Compulsory English
6.4T6 Second Language

Semester-V

Core Group	1. 5T1 Financial Accounting IV			
	2.5T2 Management Accounting			
	3. 5T3 Management Process			
	4. 5T4 Indian Economics-I			
Elective Group-I	5. 5T5 .1 Marketing Management OR 5T5.2 Computerizes Accounting			
Foundation Group I	6. 5T6.1 Business Finance 1			
	OR 5T6.2 Auditing			

Semester-VI

Core Group 1.6T1 Financial Accounting -V		
	2. 6T2 Cost Accounting	
	3.6T3 Advanced Statistics	
	4. 6T4 Indian Economics-Ii	
Elective Group-II	5. 6T5.1 Human Resource Management OR 6T5.2 Indirect Tax	
Foundation Group II	6. 6T6.1 Business Finance-II OR 6T6.2 Industrial Law	



Workload

Workload Chart (70 periods per week) (Odd Semesters) (July to November)

B. Com. Semester - I			B. Com. Semester – III			B. Com. Semester – V		
S. No.	Subjects	N/o. of Periods	S.	Subjects	No. of Period	S. No.	Subjects	No. of Periods
					s			
1.	Financial Accounting-I	5	1.	Financial Accounting-II	5	1.	Core Group 1. Financial	5
2.	Business Organization	5	2.	Business Communication and Management	5	3	Accounting IV Management Accounting Management Process	5 5
							Indian Economics	5
3	Company Law	5	3.	Business Law	5	5.	Elective Group - I Marketing Management OR Computerized Accounting	5
4.	Business Economics –I	5	4.	Monetary Economics -I	5	6.	Foundation Group - I Business Finance -I OR Auditing	5
Т	otal Periods	20		Total Periods	20		Total Periods	30



Workload Chart (70 periods per week)(Even Semesters)

(December to April)

B. Com. Semester - II		B. Com. Semester – IV			B. Com. Semester – VI			
S. No.	Subjects	No. of Periods	S. No.	Subjects	No. of Periods	S. No.	Subjects	No. of Periods
1.	Statistics and Business Mathematics	5	1.	Financial Accounting-III	5	1. 2.	Core Group Financial Accounting-V Cost	5 5
2.	Business Management	5	2.	Skill Development.	5	3. 4.	Accounting Advanced Statistics Indian Economics-II	5
3.	Secretarial Practice	5	3.	Income Tax	5	5.	Elective Group-I Human Resource Management OR Indirect Tax	5
4.	Business Economics – II	5	4.	Monetary Economics –II	5	6.	Foundation Group- I Business Finance-II OR Industrial Law	5
To	otal Periods	20			20			30



WEEKLY Workload Chart (LANGUAGES) (For Semesters I, II, III & IV)

	SUBJECT(S)	PERIODS
1.	Compulsory English	5 PERIODS OF THEORY + 1 PERIOD OF TUTORIAL FOR A BATCH OF 20 STUDENTS
2.	Second Language - Supplementary English/ Hindi/ Marathi/ Sanskrit etc.	5 PERIODS OF THEORY

II. CONVERSION OF MARKS TO GRADES AND CALCULATIONS OF GPA (GRADE

POINT AVERAGE) AND CGPA (CUMULATIVE GRADE POINT AVERAGE):

In the Credit and Grade Point System, the assessment of individual Subjects in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by some mechanism wherein the overall performance of the Learners can be reflected after considering the Credit Points for any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

Abbreviations and Formulae Used

G: Grade

GP: Grade Points

C : Credits

CP: Credit Points

CG: Credits X Grades (Product of credits & Grades)

SGPA = Σ CG: Sum of Product of Credits & Grades points / Σ C: Sum of Credits points

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designated as GPA)

CGPA: Cumulative Grade Point Average shall be calculated for the entire Programme by considering all the semesters taken together.

While calculating the CG the value of Grade Point 1 shall be consider Zero (0) in case of learners who failed in the concerned course/s i.e. obtained the marks below 40. After calculating the SGPA for an individual semester and the CGPA for entire programme, the value can be matched with the grade in the Grade Point table as per the Five (05) Points Grading System and expressed as a single designated GRADE such as O,A,B,C, F. (Fail).



Marks	Grade	Grade Points
75& above	O (Outstanding)	10
60-74	A (Very Good)	09
45-59	B (Good)	08
40-44	C (Average)	07
39& Below	F (Fail)	00

CGPA	Grade	Division
10	O (Outstanding)	Distinction
9-10	A(Very Good)	First
8-9	B (Good)	Second
7-8	C (Average)	Third

Note: -

• Consider Grade Points equal to Zero for (C x G) calculations of failed Learner/s in the concerned course/s.

The illustration for the conversion of marks into grades in a course and semester Illustrations of Calculation:- Pass

Subjects	Total Maximum Marks	Total Minimum Marks	Total Marks Obtained	Grade(G)	Grade points (GP)	Credit of the Course(C)	(Credit) X (Grade points)(CX GP)	SGPA=ΣCG/ΣC
C-11	100	40	60	A	9	4	36	SGPA
C-12	100	40	50	В	8	4	32	=208/24 =8.67
C-13	100	40	75	О	10	4	40	Grade B
C-14	100	40	70	A	9	4	36	RESULT =PASS
C-15	100	40	48	В	8	4	32	
C-16	100	40	52	В	8	4	32	
Total	600	240	355	-	48	24	208	

Illustrations of Calculation:- Fail



Subjects	Total Maximum Marks	Total Marks Obtained	Grade(G)	Grade points(GP)	Credit of the Course(C)	(Credit) X (Grade points)(CX GP)	SGPA=ΣCG/ΣC
C-31	100	32	F	0	4	00	SGPA
C-32	100	34	F	0	4	00	=102/24
C-33	100	60	В	8	4	32	=4 .24 Grade
C-34	100	75	О	10	4	40	FRESUL
C-35	100	33	F	0	4	00	T -FAIT
C-36	100	55	В	8	4	32	-
Total	600	304		26	24	102	

Provision of Direction No.44 of 2001 governing the award of grace marks for passing an examination, securing higher Grades shall apply to the examination

III. GUIDELINES FOR SETTING QUESTION PAPERS:

- .The question paper should be set in such a manner so as to cover the complete syllabus as prescribed by the University.
- .The numerical questions in any of the subjects shall be set in ENGLISH only and the candidate shall have to answer such questions in ENGLISH only. The candidate may answer non-numerical questions in ENGLISH, MARATHI or HINDI.
- The duration of the Semester wise End Examination shall be **3.00** Hours per course.



ABSORPTION SCHEME -I

Bachelor of Commerce (B.Com)(Old Course Before 2013-2014)

It is notified for general information of all concerned that the failure students of **Bachelor of Commerce (B.Com) OLD course** shall be absorbed in the **New course** introduced from the session 2014-2015 examination with the following scheme.

- 1. Those who have completed & passed **B.Com Part I as per Old course** are eligible for admission in the **B.Com Part II New course.**
- 2. Failure students of **B.Com Part I old course** and having ATKT as per rules are eligible to take admission in **B.Com Part-II New course**. They should clear their **B.Com Part I old course backlog** papers in next **three attempts** (**Last Chance Winter 2016**). If they fail to pass in **Winter-2016** attempt they will have to appear in parallel papers of **New course**

Scheme as per absorption scheme indicated in Appendix- I.

Note: The students who will appear in parallel papers of **New course scheme** paper with maximum theory marks 80, will get proportional marks out of 100 updated in **old course marksheetofB.Com Part - I**.

3. Those who have completed & passed **B.Com Part - II & B.Com Part -II as per Old course** are eligible for admission in the **B.Com Part - III**

New course.

4. Failure students of **B.Com Part - II old course** and having ATKT as per rules are eligible to take admission in **B.Com Part-III New course**. They should clear their **B.Com Part - II old course backlog** papers in next **three attempts** (**Last Chance Winter 2017**). If they fail to pass in **Winter-2017** attempt they will have to appear in parallel papers of **New course**

Scheme as per absorption scheme indicated in Appendix- II.

Note: The students who will appear in parallel papers of **New course scheme** paper with maximum theory marks 80, will get proportional marks out of 100 updated in **old course marksheetofB.Com Part - II**.

5. Failure students of B.Com Part-III old course are having chances up to Winter 2018 examination (Last Chance). So they should appear B.Com Part-III old course examination & are required to clear their backlog. After that those who will have backlog in the B.Com Part-III old course will have to appear in parallel papers of New course scheme as per the

absorption scheme indicated in Appendix- III.



Note: The students who will appear in parallel papers of **New course scheme** paper with maximum theory marks 80, will get proportional marks out of 100 updated in old course mark sheet of **B.Com Part-III**.

6. The students opted for UGC vocational subjects in **B.Com** (old course) & failed will have to appear in respective vocational paper of **B.Com** (new course) as indicated in Appendix – IV.

Appendix- I B.Com Part- I

Sr. No	Old course Before 2013-2014	Max.	Sr.No.	New Course from 2014-	Max.
		Marks		2015	Marks
	Theory			Theory	
1	Compulsory English	100	1	Compulsory English	100
2	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)			II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)	
3	Financial Accounting – I	100	3	Financial Accounting - I	100
4	Basics of Computer & Statistical Techniques	100		Fundamentals of Statistics & Computer	100
5	Principles of business Management	100		Principles of Management	100
6	Business Economics	100	6	Business Economics	100
7	Optional Paper - I (Any Group)	100	7	Company Law & Secretarial Practice (CLSP)	100



Appendix- II B.Com Part-II

Sr.N	Old course Before 2013-2014	Max.	Sr.No.	New Course from 2014-2015	Max.
0.		Marks			Marks
	Theory			Theory	
1	Compulsory English	100	1	Compulsory English	100
	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)	100		II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)	
3	Financial Accounting – II	100	3	Financial Accounting - II	100
4	Cost & Management Accounting	100	4	Cost & Management Accounting	100
5	Company Law & Secretarial Practice	100	5	Business and Industrial Law	100
6	Monetary Economics	100	6	Monetary Economics	100
7	Optional Paper - II (Any Group)	100	7	Business Communication	80

Appendix- III B.Com Part-III

Sr.No	Old course Before 2013-2014	Max.	Sr.No	New Course from 2014-2015	Max.
		Marks	•		Marks
	Theory			Theory	
1	Financial Accounts & Auditing –	-100	1	Financial Accounting – III	100
2	Income Tax	100	2	Income Tax & Auditing	100
3	Business Law	100	3	Business Finance	100
4	Business Communication & Management	100		Functional Management	100
5	Indian Economics	100	5	Indian Economy	100
6	Optional Paper - III (Any Group)	100	6	Computerized Accounting	80



Appendix- IV

B.Com Part- I (Vocational Subjects)

Sr No.	Old course Before 2013-2014	Max. Mark s		New Course from 2014-2015	Max. Mark s
	Theory			Theory	
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – I	70	1	Group I. Tax Procedures & Practice Tax Procedures & Practice – I	70
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- I		2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- I	
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – I		3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – I	
4	Group IV. Computer Applications MIS & IT – I	70		Group IV. Computer Applications Information Technology & MIS (IT & MIS)	70
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – I		5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – I	70
6	Entrepreneurship Development – I	70	6	Entrepreneurship Development – I	70



B.Com Part- II (Vocational Subjects)

Sr	Old course Before 2013-2014	Max.	Sr	New Course from 2014-2015	Max.
No.		Mark	No.		Mark
		S			S
	Theory			Theory	
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – II	70		Group I. Tax Procedures & Practice Tax Procedures & Practice – II	70
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice-II			Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- II	
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – II			Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – II	
4	Group IV. Computer Applications MIS & IT – II	70		Group IV. Computer Applications Visual Basic & DBMS (VB & DBMS)	
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – II	70		Group V. Principles and Practice of Insurance Principles and Practice of Insurance – II	
6	Entrepreneurship Development – II	70	6	Entrepreneurship Development – II	70



B.Com Part-III

(Vocational Subjects)

Sr No.		Max. Mark s		New Course from 2014-2015 Max. Mark s
	Theory			Theory
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – III	70		Group I. Tax Procedures & 70 Practice Tax Procedures & Practice – III
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- III		2	Group II. Office management and 70 Secretarial Practice Office Management & Secretarial Practice- III
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – III		3	Group III. Advertising, Sales 70 Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – III
4	Group IV. Computer Applications MIS & IT – III	70		Group IV. Computer Applications 70 E-Commerce & Web Development (EWD)
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – III	70		Group V. Principles and Practice 70 of Insurance Principles and Practice of Insurance – III
6	Entrepreneurship Development – III	70		Entrepreneurship Development –70 III



ABSORPTION SCHEME –II (Old Course 2014-2015 & New Course 2016-2017)

Bachelor of Commerce (B.Com)(Old Course 2014-2015) The students of B. Com course of 2014-2015who are not eligible for getting admission in B. Com part- II from B. Com part-I as per prevailing ATKT rules shall have to pass in the subjects given in the absorption scheme as below.

After becoming eligible they will be admitted in Semester III of CBCS2016-2017

Similarly, those students who are not eligible for getting admission in B. Com part-III from B. Com-II shall have to pass in the subjects given in the absorption scheme II as below. After becoming eligible they will be admitted in semester V of CBCS 2016-2017.

Only three attempts of successive examination shall be given to such students

For example- If the student fails in B. Com part –I in summer 2016 shall get winter 2016, Summer 2017, and Winter 2017 attempts only

Appendix- I B.Com Part- I

Sr. No	Old course(2014-2015)	Max. Marks		New Course (2016- 2017)	Max. Marks
	Theory	17441		Theory	
1	Compulsory English	100	1	Compulsory English	100
2	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)		2	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)	
3	Financial Accounting – I	100	3	Financial Accounting - I	100
4	Fundamentals of Statistics & Computer	100	4	Statistics & Business Mathematics	100
5	Principles of business Management	100	5	Business of Management	100
6	Business Economics	100	6	Business Economics-I	100
7.	Company Law & Secretarial Practice(CLSP)	100	7	Company Law	100



Appendix- II B.Com Part-II

Sr.N	Old course(2014-2015)	Max.	Sr.No.	New Course (2016-2017)	Max.
о.		Marks			Marks
	Theory			Theory	
1	Compulsory English	100	1	Compulsory English	100
	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)		2	II nd Language (Other Indian language as per syllabus) (Hindi, Marathi, etc.)	
3	Financial Accounting – II	100	3	Financial Accounting - II	100
4	Cost & Management Accounting	100	4	Cost Accounting	100
5	Business Communication	100	5	Business Communication & Management	100
6	Monetary Economics	100	6	Monetary Economics-I	100
7.	Business & Industrial Law	100	7	Business Law	100

Appendix- III B.Com Part-III

Sr.No.	Old course(2014-2015)	Max.	Sr.No.	New Course (2016-2017)	Max.
		Marks			Marks
	Theory			Theory	
1	Financial Accounts – III	100	1	Financial Accounting – III	100
2	Income Tax& Auditing	100	2	Auditing	100
3	Functional Management	100	3	Management Process	100
4	Indian economy	100	4	Indian Economics -I	100
5	Business Finance	100	5	Business Finance - I	100
6	Computerized Accounting	80		Computerized Accounting	100



Appendix- IV

B.Com Part- I (Vocational Subjects)

Sr No.	Old course(2014-2015)	Max. Mark s		New Course (2016-2017)	Max. Mark s
	Theory			Theory	
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – I	70		Group V. Principles and Practice of Insurance Principles and Practice of Insurance – Life Insurance	
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- I		2	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – Life Insurance	
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – I		3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – I	
4	Group IV. Computer Applications MIS & IT – I	70	4	Group IV. Computer Applications Fundamentals of Information Technology (FIT)	
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – I			Group V. Principles and Practice of Insurance Principles and Practice of Insurance – Life Insurance	
6	Entrepreneurship Development – I	70	6	Entrepreneurship Development – I	70



B.Com Part- II (Vocational Subjects)

Sr No.	Old course(2014-2015) Theory	Max. Mark s		`	Max. Mark s
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – II	70	1	Principles & Practice of Insurance General Insurance – Paper I	70
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- II		2	Principles & Practice of Insurance General Insurance – Paper I	70
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – II		3	Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – II	
	Group IV. Computer Applications MIS & IT – II	70	4	Computer application- Software Packages (Word & Excel)	70
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – II	70	5	Principles & Practice of Insurance General Insurance – Paper I	70
6	Entrepreneurship Development – II	70	6	Entrepreneurship Development - II	70



B.Com Part-III (Vocational Subjects)

Sr No.	Old course(2014-2015)	Max. Marks			Max. Mark s
	Theory			Theory	
1	Group I. Tax Procedures & Practice Tax Procedures & Practice – III	70	1	Principles & Practice of Insurance Insurance and Actuarial Science – Paper I	70
2	Group II. Office management and Secretarial Practice Office Management & Secretarial Practice- III		2	Principles & Practice of Insurance Insurance and Actuarial Science – Paper I	70
3	Group III. Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management – III		3	Advertising, Sales Promotion and Sales Management. Advertising, Sales Promotion and Sales Management. III	
4	Group IV. Computer Applications MIS & IT – III	70	4	Group IV. Computer Applications Web Designing using HTML (WD)	70
5	Group V. Principles and Practice of Insurance Principles and Practice of Insurance – III	70	5	Principles & Practice of Insurance Insurance and Actuarial Science – Paper I	70
6	Entrepreneurship Development – III	70	6	Entrepreneurship Development - III	70

The students of old course shall be given 03 attempts to pass their examination with old course starting from implementation of New Course.



Proposed New syllabusFor B. Com

From the Academic session 2016-2017

B.Com. - First Year

Semester-I

1T1: Financial Accounting-I

Unit – I Financial Accounting

Meaning, objectives and principles of Accounting, Accounting concepts & Conventions, Accounting Standards- AS 1 to AS 10. Final accounts of Sole Traders. (**Theory & Numerical**)

Unit – II Hire Purchase Accounts

Meaning of Hire Purchase Accounts, Features, Merits and Demerits of Hire Purchase System, Distinction between Hire Purchase and Instalment System.

(Theory & Numerical Excluding Instalment System and Repossession of Assets)

Unit - III

Final Accounts of Co - Operative Societies: (As per Maharashtra Co-Operative Societies Act 1960)- Introduction, Types of Co-operative societies Preparation of Trading & Profit and Loss A/C and Balance Sheet. (**Theory & Numerical**)

Unit - IV

Joint Venture Accounts

Meaning, Distinction between Joint venture and Partnership, Methods of joint venture accounting. (Theory & Numerical on Centralized & Decentralized Method)

The Financial year ends on 31st March.

Reference Books:

- S. N. Maheshwari :- Financial Accounting Vikas Publishing House, New Delhi.
- Gupta R. L. Advanced Financial Accounting S. Chand & Sons.
- Kumar, Anil S. Advanced Financial Accounting Himalaya Publication House.
- Shukla and Grewal: Advanced Accounts (S. Chand & Ltd. New Delhi).
- Jain and Narang: Advanced Accounts (Kalyani Publishers, Ludhiana).
- Sr. K. Paul: Accountancy, Volume –I and II (New Central Book Agency, Kolkata).
- R. K..Lele and Jawaharlal: Accounting Theory (Himalaya Publishers).
- M. A. Arulnandam :- Advance Accounting Himalay Publication
- Gulhane, Navghare And Others- Financial Accounting –I, Sheth Publishers Pvt. Ltd. Mumbai.
- Prof. PradeepWath, Dr. R. D. Mehta, Dr. DilipGotmare :- Financial Accounting—Payal Pakashan.
- Advanced Accounts (volume –I), M. C. Shukla, T.S. Grewal, Revised by S. C. Gupta. S, Chand Publishing.



$1T1\text{-}Financial\ Accounting}-I$

Paper Pattern

N.B.-1) All questions are compulsory. 2) All questions carry equal marks.

Time :- 3 hours		Marks-80
Q. No. 1 – Unit I	a) Theory b) Problem OR	08 Marks 08 Marks
Q. No. 2 – Unit II	c) Problema) Theory	16Marks 08 Marks
	b) Problem OR c) Problem	08 Marks 16 Marks
Q. No. 3 – Unit III	a) Theoryb) ProblemORc) Problem	08 Marks 08 Marks 16 Marks
Q. No. 4 – Unit I	a) Theory b) Problem OR	08 Marks 08 Marks
	c) Problem	16 Marks
Q. No. 5	a) Unit- I b) Unit –II c) Unit-III d) Unit-IV	Problem 04 Marks Problem 04 Marks Problem 04Marks Problem 04 Marks



1T2: Business Organization

Unit – I

Nature and scope of business: Meaning and definition of business, characteristics, objectives of business, classification of business activities, Industry, Service, Commerce & Trade. Social Responsibility of Business towards different groups.

Unit – II

Forms of Business Units: Meaning, Characteristics, Advantages and Disadvantages of Sole Trader, Partnership, One Person Company, Private Company, Joint Stock Company- Concept, Classification, Service sector business: - meaning, types including BPO and KPO, advantage its role in economy

Unit - III

Organization: Meaning, Definition ,Concept and functions of Organization, Principles of Organization, Types of Organization- Line and Staff, Modern types of organizations-Project, Matrix, Formal and Informal Organization, Advantages and Disadvantages.

Unit IV

Recent Trends in Business Organization: Internal constituents of the Business Organization; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO; E-commerce, E-business, E-banking.

Suggested Books:

- 1. Jain, Khushpat S: Business Organisation, Mumbai
- 2. C.P Bose: Business Organisation & Management
- 3. Sekhri, Arun: Organisation, MUMBAI, Himalaya Publishing House, 2014
- 4. P.C.Jain: Government and business policy, Galgotia Publishing Com. New Delhi
- 5. Gulhane, Chopade Choudhary-Business Organization, Sheth Publishers Pvt. Ltd. Mumbai.
- 6. 'kekZ] ,I-,y- % O;kolkf;d laxBu] jes'k cwd fMiks] ubZ fnYyh
- 7. oekZ] ;ksxsUnzizlkn % O;kolkf;d laxBu izca/k ,oa iz'kklu] ,l-pkUn ,aM da-
- 8. Dr. A. Shende, Dr. M Dixit& Dr. D. Mohture, Business Organization, Anuradha Prakashan Nagpur.



QUESTION PAPER PATTERN BCOM – I : SEMESTER I 1T2-Business Organisation

	TIME	:- 3 Hours]		[Full Marks:- 80
		N.B	(-1) All questions are compulsory.	
			2) All questions carry equal mark	S.
Q.1.	()	I IN HITTO II		00 M 1
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I	OD	08 Marks
	()		OR	101.1
0.0	(c)	UNIT – I		16Marks
Q.2.	(-)	LINUTE II		00 Maulan
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II	OD	08 Marks
	(2)	I INITE	OR	16Moules
	(c)	UNIT – I		16Marks
Q.3.				
Q.3.	(a)	UNIT – III		08 Marks
	(a) (b)	UNIT – III		08 Marks
	(0)	ONII – III	OR	00 Warks
	(c)	UNIT – I	OK	16Marks
Q.4.	(0)	ONII – I		TOWIAIKS
Q1.	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
	(0)		OR	0011111115
	(c)	UNIT – I		16Marks
	(0)	01,11		101/14/110
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



1T3: Company Law

Level of Knowledge: - Basic Conceptual Knowledge.

Objective: To make aware the students with basic concept of company law [The Company Act 2013 with Amendments up to June 2016]

UNIT - I

- (i) Background of New Company Act 2013.
- (ii) Corporate Personality Company, Meaning of Company, Characteristics of a Company, Lifting of Corporate Veil
- (iii) Kinds of Company- Private Company, Public Company, Company limited by Share, Company Limited by guarantee, Unlimited Company, Association not for profit, Government Company, Foreign Company, Holding and Subsidiary and associate company with features of all kinds of company.
- (iv) Promotion and incorporation of company- stages in formation and incorporation of company, registration and commencement of business, Certificate of Incorporation

UNIT – II

- (i) Memorandum of Association- Meaning, Definition, Importance and Content of Memorandum of Association.
- (ii) Articles of Association Meaning, Definition, Importance and content of Articles of association.
- (iii) Private Placement and Prospectus: Meaning and definition of private placement and prospectus, public offer, types of prospectus- Deemed prospectus, Shelf prospectus, Red Herring Prospectus, Abridge prospectus.
- (iv) Misrepresentation in prospectus, Consequences of misrepresentation and remedies for misrepresentation in prospectus.

UNIT-III

- (i) Share and share capital- Meaning and nature of capital and share capital, kinds of share- equity, preference, sweat equity, bonus, employee stock option scheme, and Right issue.
- (ii) Debt Capital (Borrowing and Debenture)- Meaning and nature of debt and debt capital, Types of different types of borrowing
- (iii) Difference between- Share and debenture, owned capital and debt capital.
- (iv) Depositories and dematerialization of securities- meaning and nature of depositories, procedure of dematerialization of securities.

UNIT - IV

- (i) Membership in a company Meaning of shareholder and member, distinction between shareholder and member, kinds of member.
- (ii) Procedure to become member and shareholder of a company, Concept of Transfer and Transmission of Securities (Share and Debenture)
- (iii) Directors Meaning, Appointment, Power and Duties, Managing Director and Whole Time Director Appointment and Qualification.



(iv) Concept of Small Shareholders Director, Women Director, Resident Director and Independent Director, Auditor – Meaning, Appointment and Removal

Reference Books:

- Company Law By Ashok K. Bagrial:, Vikas Publication House
- Company Law And Practice, Ratan Nolakha: Vikas Publication House
- Business Law Including Company Law, Gulshan, S S and Kapoor, G K, New Age International (P) Ltd., Publishers.
- Company Law A comprehensive Textbook on New Companies Act 2013, Kapoor G.K. and Dhamija Sanjay: Tazman Publication
- Company Law & Secretaria lPractice- Appannaian Reddy, Prabhudev, Himalaya Publishing House
- Faroq Haque Company Law., Sheth Publishers Pvt. Ltd. Mumbai
- Company Law Dr. A. Shende, Dr. R. Ingole, Anuradha Prakashan, Nagpur
- Company Law and Secretarial Practice- Dr. R.K. Nelakha, Ramesh Book Depot, Jaipur, New Delhi.
- Secretarial Practice & Company Law- Arunkumar, Rachana Sharma- Atlantic Publishers and Distributors
- A Text Book of Company Law & Corporate Law) P.P.S.Gogna, S. Chand Publishing.



QUESTION PAPER PATTERN 1T3-COMPANY LAW

	TIME:	- 3 Hours]		[Full Marks:- 80
		N.B	(1) All questions are compulsory.	
			2) All questions carry equal mark	S.
Q.1.				
Q.11.	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II	O.D.	08 Marks
	(-)	IINIT I	OR	16) 4 - 1 -
	(c)	UNIT – I		16Marks
Q.3.				
Q.5.	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
	, ,		OR	
	(c)	UNIT – I		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.5.				
Q.J.	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT - IV		04 Marks



1T4: Business Economics – I

Unit I: Nature and Scope of Business Economics

Business Economics-Meaning, scope and objectives of business economics. Nature and types of business decisions. Role and social responsibility of business & business economist. Micro and Macro Economics- Definition, scope, merits and demerits.

Unit II: Theory of Consumption

Law of Demand, Demand determinants, Changes in demand, Indifference Curve Concept- Definition, properties, importance of indifference curves. Elasticity of Demand-Concept, definition, kinds, measurement of elasticity of demand, Factors influencing elasticity of demand, Importance of elasticity of demand. Demand Forecasting- Meaning, need, importance, methods of demand forecasting.

Unit III: Theory of Production

Concept of Production Function- Concept, definition, Types of Products, Total Production, Average Production, Marginal Production. Law of Variable Proportions-Assumptions, significance & limitations. Isoquant Curves- Definition, general properties of Isoquant curves, Expansion Path. Law of Returns to Scale, Internal and External Economies and Diseconomies of Scale, Ridge Lines. Theories of Population - Malthusian Theory of Population, Optimum Theory of Population, Demographic Transition Theory of Population and Criticisms. Law of Supply.

Unit IV- Theory of Cost and Revenue

Law of Supply & Criticisms, Factors influencing supply. Concept of Cost in the Short &Long Run- Accounting Cost, Economic Cost, Opportunity Cost, Fixed Cost, Variable Cost, Direct and Indirect Costs, Real Cost, Explicit & Implicit Costs, Money Cost, Total Cost, Average Cost, Marginal Cost, Selling Costs. Revenues - Total Revenue, Average Revenue, Marginal Revenue and their Relationship.

Books Recommended:

- 1. Business Economics, V.G. Mankar, Himalaya Publication House.
- 2. Business Economics, H.L.Ahuja, S.Chand Publishing
- 3. Business Economics, Dr. A. shende, Dr. D. Mohture, Dr. Dixit,
- Dr. R. Gan, Anuradha Prakashan Nagpur
 - 4. Micro Economics, P.N.Chopra, Kalyani Publishers.
 - 5. Micro Economics, D.D.Chaturvedi, Galgotia Publishing Company.
 - 6. Principles of Economics, D.M.Mithani, Himalaya Publishing House.
 - 7. Advance Micro Economic Theory, M.Maria John Kennedy, Himalaya Publishing House.
 - 8. Business Ecomomics, Rashi Arora, Sheth Publishers, Mumbai
 - 9. Business Economics, Dr. Samudra, Sai Jyoti Prakashan



QUESTION PAPER PATTERN BCOM – I : SEMESTER I

1T4-Business Economics- I

	TIME	:- 3 Hours]		[Full Marks:-80
		N.B	(-1) All questions are compulsory.	
			2) All questions carry equal mark	S.
			2) I'm questions early equal main	
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.3.				
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



Allocation of marks for the subjects-

- 1. Financial Accounting
- 2. Business Organization
- 3. Company Law and
- 4. Business Economics-I

1a	Two perio	Two periodical class tests				
1b	An assign	An assignment/Viva/Group Discussion/Seminar based on curriculum to				
	be assesse	d by the teacher con	cerned			
1			Internal assessment Total marks	20 marks		
2	Unit- I	20 marks				
	Unit-II	20 marks				
	Unit-III	20 marks				
	Unit-IV	20 marks				
				80 marks		
			Total marks per subject	100 marks		



1T5-Compulsory English

Unit –I Short Stories:

- 1. The Gifts by O Henry
- 2. The Quality by J. Galsworthy
- 3. The Axe by R. K. Narayan

Unit –II Poems:

- 1. You turned away yourself by Kabir
- 2. Mending wall by Robert Frost
- 3. Unknown Citizen by W.H. Auden

Unit –III Essays:

- 1. Tolerance by E.M. Forster
- 2. The Philosophy of Pleasure by Fulton J. Sheen
- 3. On Painted Face by A. G. Gardiner

Unit -IV

- A) I) Synonym/Antonym of Given words (Match the following format)
- II) One Word Substitute
- B) Business Correspondence: Job Application Letter, Interview Call Letter, Job Offer Letter
- C) Comprehension of an Unseen Passage
- D) Precis Writing

Prescribed Textfor UNITS I, II & III: Swan and Pearls (Raghav Publishers)

Reference Books:

For UNIT IV(A) (Grammar /Vocabulary items)

- **1.** Learner's English Grammar & Composition by Dr. N.D.V.Prasada Rao (S.Chand) For Unit IV (B)
- **2.** Business Correspondence and Report Writing R.C.Sharma & Krishna Mohan (Tata McGraw-Hill)
- 3. Developing Communication Skills Krishna Mohan & Meera Banerji (Macmillan)



Question Paper Pattern 1T5-: Compulsory English SEMESTER – I

N.B. LAQ - Long Answer Question to be answered in about 150 words.

SAQ - Short Answer Question to be answered in about 75 words.

VSAQ – Very Short Answer Question to be answered in one or two sentences.

Total	Marks-	80
--------------	--------	----

Q 1. A. One LAQ out of Two based on Short Stories (Unit I) 08 Marks
B. Two SAQs with internal choice based on Short Stories (Unit I) 2 x 4 Marks - 08 Marks

Q 2. A. One LAQ out of Two based on prescribed poems (Unit II)

08 Marks

B. One LAQ out of Two based on the prescribed Essays (Unit III)

08 Marks

Q 3. A. Two SAQs with Internal Choice from Unit III (2 x 4 Marks) = 08 Marks
B. (i) Synonyms/Antonyms - Match the following - 4 items against 6 options (4 x 1 Marks)

(ii) One word substitute - 4 out of 6 (4 x 1 Marks)

04 Marks

Q 4. A. One out of Two items based on Business Correspondence (Unit IV) 08 Marks

B. Comprehension of Unseen Passage – 4 VSAQs – 4 x 2 Marks 08 Marks

Q 5. A. Make a Precis of the given passage and give it a suitable Title
B. Five VSAQs based on Unit I and Unit III

08 Marks
(4×2 Marks) = 08 Marks

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.

Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments - 6+6 = 12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS



Semester - I 1T6.1- Supplementary English

Unit 1- Prose

- 1. A New Star Rises- Jawaharlal Nehru
- 2. Mahatma Gandhi- Louis Fischer
- 3. Jagdish Chandra Bose- Aldous Huxley
- 4. My Greatest Olympic Prize- Jesse Owens
- 5. Eating for Health- Rajkumari Amrit Kaur

Unit 2 - Poetry

- 1. Virtue- George Herbert
- 2. Solitude- Alexander Pope
- 3. How Sleep the Brave-William Collins

Non-Textual portion-

Unit 3 – Writing Skills

(A) Social Correspondence:

Letter of Congratulations, Letter of Condolence, Informal Invitation

(B) Writing Classified Advertisements

Unit 4 – Grammar

Spotting errors in the use of - (1) Articles (2) Subject-Verb Agreement

Prescribed Text- Zenith- An Anthology of Prose and Poetry (Raghav Publishers)

Reference books

- 1. Macmillan Foundation English R.K. Dwivedi, A. Kumar (for Unit IV)
- 2. Developing Communication Skills -- Krishna Mohan & Meera Banerji (Macmillan Publishers) (for the topic of 'Social Correspondence under Unit III)
- 3. Write Right Sarita Manuja (Macmillan) (For the topic 'Writing Classified Advertisements' given under Unit III)



1T6.1- Supplementary English Question Paper Pattern

Semester - I

Q1.

(A) Unit 1 Prose - LAQ 150 words (2 out of 4)2 x 08 = 16 marks

Q 2.

(B) Unit 1 Prose - SAQ 75 words(4 out of 5)4 x 4 = 16 marks

Q 3.

- (A) Unit 2 Poetry- LAQ 150 words (1 out of 2) $1 \times 08 = 08$ marks
- (B) Unit 2 Poetry SAQ 75 words (2 out of 3) $2 \times 4 = 08$ marks

Q 4.

Non-textual portion

(A) Social Correspondence: 1 x 08= 08Marks

(B) Writing Classified Ads

 $1 \times 08 = 08 \text{ Marks}$

Q 5. (A)i. Correct the error in the use of Articles (4) $04 \times 1 = 04 \text{ Marks}$

ii. Correct the error in the subject-verb agreement (4)04 x 1 = 04Marks

(B)VSAQs Units 1 & 2

Answer each of the following in one or two lines $04 \times 2 = 08$ Marks

Total Marks of Theory Examination-80

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.

Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.



2 Assignments -6+6 = 12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS

Theory Examination – 80 Marks Internal Assessment – 20 Marks Total: 100 Marks



1T6.2 - विषय : मराठी सत्र पहिले २०१६

प्रश्न क्र.	घटक क्र.	अभ्यासक्रम	गुण	शेरा
8	ę	समकालीन राष्ट्रीय, सामाजिक समस्यावर आधारित (चार पर्यायांपैकी एका विषयावर, शब्द मर्यादा-४००)	२०	
२	२	गद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन भाग एक	3 9	
3	3	 लोकशाहीचे भवितव्य (डॉ. बाबासाहेब आंबेडकर) नौका (प. भा. भावे) अस्पृश्यांचा आधारवड (शिवाजी सावंत) बेगड (योगीराज वाघमारे) उमा (वि. स. जोग) पद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन भाग एक 	3 4	
8	8	 श. ज्ञानेश्वरांच्या विराण्या (संत ज्ञानेश्वर) २. मन (बिहणाबाई चौधरी) ३. गणपतवाणी (बा. सी. मर्ढेकर) ४. गिरणीची लावणी (नारायण सुर्वे) ५. माउली भुकेले बेट (सुधाकर गायधनी) व्यावहारिक मराठी 	१०	
		१. पत्रलेखन २. इतिवृत्त लेखन		



1T6.2-विषय: मराठी

प्रश्न पत्रिकेचे स्वरूप

सत्र : पहिले

वेळ:३ तास)

(एकूण गुण-80)

प्रश्न:१ समकालीन राष्ट्रीय, सामाजिक समस्यांवर आधारित निबंध (चार पर्यायांपैकी एका विषयावर) शब्दमर्यादा-४०० शब्द (16 ग्ण)

प्रश्न: २ गद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 ग्ण)

प्रश्न: ३ पद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 ग्ण)

प्रश्नः ४ दोन गद्य विभागावर व दोन पद्य विभागावर आधारित चार लघु प्रश्नांच्या दोन गटांपैकी एक गट सोडवा (16 गुण)

प्रश्नः ५ एक लघु प्रश्न गद्य विभागवर, एक लघु प्रश्न पद्य विभागावर आणि दोन लघु प्रश्न व्यावहारिक मराठीवर आधारित अशा चार लघु प्रश्नांची उत्तरे लिहा (16 गुण)

एकूण गुण विभागणी

- १. गद्य विभाग 28 गुण
- २. पद्य विभाग 28 गुण
- 3. व्यव्हारिक मराठी 08 गुण
- ४. निबंध 16 ग्ण

एकूण गुण : 80

अंतर्गत मूल्यांकन गुण २०: संबंधित महाविद्यालयातील प्राध्यापकांनी परीक्षार्थ्याची वर्गातील उपस्थिती (०५ गुण), परीक्षार्थ्याचा वर्गातील सक्रीय सहभाग (०५ गुण) आणि लिखित स्वरूपातील गृह पाठ (१० गुण) या निकषांवर एकूण २० गुणांपैकी विद्यार्थ्यांचे अंतर्गत मूल्यांकन करणे.

सत्र लेखी परीक्षा : ८० गुण अंतर्गत मूल्यांकन : २० गुण एकूण गुण : १००



1T6.3-fo"k;%& fgUnh izFke I=% SSSSemester I

le;%& rhu ?kaVs dqy vad%&80 Vad

(Units) bdkb;ksa Units)dk ikB~;Øe Øekuqlkj

bdkbZ 1 Lkedkyhu jk"Vah;] lkekftd rFkk vkfFkZd leL;kvksa ij vk/kkfjr

fuca/k A (Unit-1)

1/4fdUgh pkj esa ls,d fo"k; ij & 'kCn lhek 400 rd1/2

Xk| foHkkx%& ikB~;iqLrd%&^^lkfgR; ohfFkdk** bdkbZ 2

11/2 xi'ki& fuca/k&ukeoj flag (Unit-2)

2½ IPph ohjrk& fuca/k&ljnkj iw.kZflag

3½ dQu & dgkuh &izsepan

4½ phQ dh nkor& dgkuh & Hkh"e lkguh

5½ 'kj.kkxr& dgkuh& o`Unkouyky oekZ

i| foHkkx%& ikB~;iqLrd%& ^^lkfgR; ohfFkdk**

1½ dchj ds nksgs & dchjnkl bdkbZ 3

2½ cky yhyk & lwjnkl (Unit-3)

31/2 HkfDr] uhfr ds nksgs &fcgkjh

4½ oj ns] oh.kkokfnuh oj ns& lw;ZdkUr f=ikBh fujkyk

5½ fgekfnz rqax Ja`x ls & t;'kadj izlkn

vU; ikB~; lkexzh%&

11/2 ikfjHkkf"kd 'kCnkoyh&ikB~;iqLrd esa layXu okf.kT; ls lcaf/kr bdkbZ4

ikfjHkkf"kd 'kCnksa dk vaxzsth ls fgUnhrFkk fgUnh ls vaxzsth esa v/;;u

(Unit-4) visf{kr gSA

> 2½ dYiuk foLrkj&lkkB~;iqLrd esa layXu mfDr;ksa dh lwph ls gh dYiuk foLrkj dk v/;;u visf{kr gSA

> > iz'u&i= dk izk:lk ,oa vad foHkktu

izFke l= 1T6.3-fo"k;%& fgUnh

le;%& rhu ?kaVs

dqy vad%&80

iz'u&1Lkedkyhu jk"Vah;] lkekftd rFkk vkfFkZd leL;kvksa ij vk/kkfjr fuca/kA vad&16

1/4 fdUgh pkj esa ls ,d fo"k; ij & 'kCn lhek 400 rd1/2

iz'u&2x|& foHkkx ij vk/kkfjr ikBksa esa ls fodYi ds lkFk nh?kksZRrjh iz'u A vad&16

1/4nks iz'uksa esa ls ,d iz'u dk mRrj visf{kr gSA1/2

iz'u&3i|& foHkkx ij vk/kkfjr dforkvksa esa ls fodYi ds lkFk nh?kksZRrjh iz'u A vad&16

1/4nks iz'uksa esa ls ,diz'u dk mRrj visf{kr gSA1/2

iz'u&4 rhu x|&foHkkx lss o rhu i|& foHkkx ij vk/kkfjr dqy Ng y?kq iz'uksa esa ls fdUgha pkj iz'uksa dsmRrj visf{kr gSA 4 x 4vad =**vad&16**

iz'u&5 blds vUrxZr lEiw.kZ ikB~;Øe ls pkj y?kqRrjh iz'u gksaxsaA izFke iz'u x| ls] f}rh; iz'u i| ls] r`rh; iz'u ikfjHkkf"kd 'kCnkoyh ls vkSj prqFkZ iz'u dYiuk foLrkj ls iwNs tk;saxsa A lHkh iz'uksa ds mRrj visf{kr gSA

 $4 \times 4 \text{ vad} = \text{vad} \& 16$

vkUrfjd ewY;kdau & 20 vad dqy vad foHkktu%&

fucU/k&16 vad x| foHkkx&28 vad i| foHkkx&28 vad vU; ikB~; lkexzh&08vad dqy vad&80 vad

Vocational Course

Semester I

(Same syllabus for all vocational group subjects in B. Com. - I) 1T7-Entrepreneurial Development-I

Time: 3 Hours Full Marks: 80

Internal Assessment: 20

Level of knowledge: Basic knowledge

20 (0.3 (200)

Off. Principal,
\$8. Maniar College, Nagour

Objective: To provide an introductory knowledge about entrepreneurship and its development process.

Unit-I

Entrepreneurship – Evolution of the concept of entrepreneur, Definitions of Entrepreneurship & Entrepreneur, Types of Entrepreneurship, Function of Entrepreneur, Characteristics of Entrepreneur, Socio-economic origins of Entrepreneurship.

Unit-II

Stages in the Entrepreneurial process, Barriers to Entrepreneurship, Environmental factors affecting Entrepreneurship, Entrepreneurial Structures.

Unit-III

Qualities of a successful Entrepreneur. Distinction between an Entrepreneur and a Manger, role of Entrepreneurship in Economic development. Theories of Entrepreneurship- Theory of Achievement Motivation, Conceptual Model of Entrepreneurship.

Unit-IV

Women Entrepreneurship- Concept of Women Entrepreneurs, Functions of Women Entrepreneurs, Growth of women Entrepreneurship and problems of women Entrepreneurs, Development of women Entrepreneurship, Recent Trends.

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande : Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.
- ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.

$\label{eq:Group-I} \textbf{Group-I: Computer Applications}$

1T8.1 : Fundamental of Information Technology (FIT)

Unit-I: Definition of Computer, Block diagram of computer, generations of computer, classification of computers, characteristics, advantages & limitations of computer. Computer organization: Central processing Unit - speed of processor, computer memory: primary & secondary, Storage devices: floppy disk, Hard disk, magnetic tapes, optical disk (CD/ DVD), pen drive. Input devices: keyboard, mouse, joystick, light pen, scanners, OCR, MICR, Touch Screen, Bar code reader. Output devices: monitor, printers, classification of printers, impact & non-impact printers, dot matrix, ink jet, laser, thermal printers, plotters.

Unit-II: Hardware & software, Software and programming languages.

Computer networks – LAN, WAN, MAN

Internet, WWW, E-Mail, education, financial service, e-Commerce, banking, shopping, advertising, e-governance. Virus, Types of Viruses, Anti-Virus, Firewall and Anti-Spy ware Utilities

UNIT - III:

Introduction to Disk Operating System (DOS):

- -File types, Directory Structure, Booting Warm and Cold Booting, Types of DOS commands (Internal and External)
- -Directory commands: DIR, MD, RD, TREE, PATH, SUBST ETC., Wild card Definitions, Commands related to file management: COPY, DEL, ERASE, REN, ATTRIB, XCOPY, BACKUP and RESTORE, General commands: TYPE DATE, TIME, PROMPT etc., batch commands, wild card characters & its use.

UNIT - IV:

Introduction to Windows Operating System:

Advantages of windows operating system, operating with windows, GUI, use of help features, starting an application, essential accessories, windows explorer, control panel, my computer, my documents, recycle bin, finding folders and files, system tools, new features in windows-7/8/10 versions.

Practical: Practical will be based on Unit-III & IV i.e. MS-DOS and Windows

BOOKS RECOMMENDED:

- 1. I.T. Today (Encyclopedia) By S. Jaiswal (Test Book)
- 2. Computer Today By Donald Senders
- 3. Computer Applications In Management Ushadahiya, Sapnanagpal (Taxmann's)
- 4. Information Technology Dr. Sushilamadan (Taxmann's)
- 5. Understanding Computer By Dineshkumar
- 6. Computer Fundamentals By P. K. Sinha
- 7. Office Automation By K.K. Bajaj (Macmilan)
- 8. Business On The Net An Introduction To The Whats And Hows Of E-Commerce By K. N. Agarwala & Others (Macmilan)
- 9. Dos/Unix & Windows: I.T. Today (Encyclopedia) By S. Jaiswal
- 10. Msdos; Manual



Vocational Course Semester – I

Group - II : Principles & Practice of Insurance 1T8.2-Life Insurance - Paper I

Time : 3 Hours] Theory : 80 Marks
Internal Assessment: 20 Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about Life Insurance.

Unit - I

Concept of Risk, Meaning, Definition, Classification of Risk

Risk management: Meaning and Definition, Objectives, Importance, Classification of Risk,

Methods of Handling Risk, factors affecting Risk Management, Principles of Insurance Management, Process of Risk Insurance Management

Unit - II

Concept of Insurance: Meaning, Definition, Need, Importance and Scope of Insurance, Benefits of Insurance

History of Insurance, Meanings of Terms used - Premium, Compensation, Cover note, Claim, Peril, actor affecting premium calculation

Reinsurance : Important concepts, characteristics, types of reinsurance, double cover, external and internal insurance.

Unit - III

Life Insurance: Meaning and definition of Life Insurance, Organization, Management, regulation, role and functions of life insurance

Insurance Contract, Essentials of Insurance Contract

Principles of Life Insurance, Classification of Life Insurance Policies.

Unit - IV

Policy conditions of Life Insurance,

Insurance document – Proposal form, policy form, cover note, certificate of Insurance, endorsement, co-insurance and renewal receipt, procedure of taking Life Insurance Policy.

Settlement of Claim on Maturity of Policy, Death of Policy holder,

Recommended books:

- Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.
- Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House
- Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication
- Principles of Insurance, Dr. Shakti Pratchbal and Dr. N.P. Dwivedi, Himalaya Publishing House
- √ बीमा के सिध्दांत एवं व्यवहार भगवती प्रकाळ आर्मा, राजीव जैन, पुरुशोत्तम दयाल— हिमालया पब्लिळिंग हाऊस



Group III.

Advertising, Sales Promotion and Sales Management Semester-I

1T8.3 -Advertising, Sale Promotion and Sales Management - I

Full Marks: 80	Time: 3 Hours
Internal Assessment : 20	
Objectives: The aim of the paper is to acquaint the stude and give experience in the application of concepts for de advertising programme.	
Unit-1Advertising Role in the Marketing Process: Legal EthicAdvertising. Functions and types of advertising.	al and social Aspects of
Unit- 2 Integrated Marketing communication .Brand manageme and Brand Building. Ethics of advertising	ent , Brand Image, Brand Equity
Unit- 3 The major players in advertising, Advertising agency, B firms, Media, Type of agencies. Structure of an agency adeveloping an ad.	<u> </u>
Unit-4	
Objective Setting and market Positioning; Dagmar Appr Audience and understanding them. Assumptions about Recommended books:	
□□Luick, John F and Siegler, William Lee, Sales promot	ion and Modern Merchandising
Richard, Edward W & Govoni Norman AP, Sa Strategies and cases (Prentice Hall India Pvt. Ltd., New I DDStanton, William J & Buskrit, management of Sales Homewood, 1987)	Delhi, 1981) □
ic A. Beach, Frank H & Buskrit, Richar	rd H, Selling principles and
Practices (Mcgraw Hill, International Book Co.1982) □ □□David Aaker, Advertising management (Prentice Ha □□□Kazmi & Batra, Advertising & Sales Promotion – Ex	



– Advertising Management, Oxford Univ. Press $\hfill\Box$

SEMESTER I QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development

TIME:- 3 Hours]			[Full Marks:- 80
		N.B 1) All questions are compulsory.	
		2) All questions carry equal marks.	
Q.1.(a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
` ,		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.2. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.3. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.4. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.5. Answer	in Brief		
(a)	UNIT – I		4 Marks
(b)	UNIT – II		4 Marks
(c)	UNIT – III		4 Marks
(d)	UNIT – IV		4 Marks



B.Com. – First Year Semester-II

2T1: Statistics and Business Mathematics

Unit – I Statistics & Measures of Central Tendency

Meaning, Scope, Importance, Functions and Limitations of Statistics. Collection of data, Tabulation and Classification, Frequency distribution.

Mean, Median, Mode, Geometric Mean and Harmonic Mean (Theory & Numericals)

Unit - II

Dispersion- Meaning and significance of dispersion, Methods of measuring dispersion, Mean Deviation, Standard Deviation, Quartile Deviation, co-efficient of variation (**Theory & Numericals**)

Unit - III

Skewness-Absolute Measures of Skewness, Relative Measures of Skewness, Karl Pearson's Coefficient of Skewness, Bowley's Coefficient of Skewness. (**Numericals**)

Unit - IV

Business Mathematics:- Ratio Proportion, Percentages, Simple & Compound Interest, Profit/ Loss. (Numericals)

Reference Books:

- Fundamentals of statistics : D. V. Elhance&VeenaElhance
- Statistics: V. K. Kapoor S. Chand & Sons
- Statistics : B. New Gupta SahityaBhavan Agra
- Fundamentals of statistics and Computer, Dr. M. Datalkar & Mrs. Sindhu Ghate, Sai Jyoti Prakashan, Nagpur
- Business Statistics A Self Study Text Book, Dr. P. C. Tulsian & Bharat Jhunjhunwala, S. Chand Publishing
- Fundamental of Statistics : S. C. Gupta Himalaya Publishing House
- Business Mathematics & Statistics : NEWK Nag & S.C. Chanda Kalyani Publishers
- Gulhane, Chopade Statistics and business mathematics, Sheth Publishers Pvt. Ltd. Mumbai
- Business Mathematics and Statistics- Dr. M. Datalkar & Mrs. S. Ghate, Sai Joyti Publication, Nagpur.
- Problem in statistics : Y. R. Mahajan Pimplapure Publisher Nagpur



Question Paper Pattern Semester-II 2T1-Statistics and Business Mathematics Paper - I

N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.

Time :- 3 hours		Marks-80
Q. No. 1 – Unit I		
	a) Theory	08 Marks
	b) Problem	08 Marks
	oR c) Problem	16Marks
Q. No. 2 – Unit II		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 3 – Unit III		
	a) Problem	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 4 – Unit I		
Q. 1.0	a)Problem	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	08 Marks
	d) Problem	08 Marks
Q. No. 5	a) Unit- I	Problem 04 Marks
Ç	b) Unit –II	Problem 04 Marks
	c) Unit-III	Problem 04Marks
	d) Unit-IV	Problem 04 Marks



2T2: Business Management

Unit I

Introduction: Meaning, Definition, concept and types of management. Principles of business Management. Scope and significance of business management.

Process of business management. Function of business Management. Management as a science or art.

Unit II

Planning: - Meaning, Nature and Characteristics, Importance, Types & Components of Planning. **Decision Making**: Meaning, characteristics & importance of decision making. Traditional and Modern techniques of Decision-Making.

Unit – III

Delegation of Authority:— Meaning, Elements, Advantages, & Obstacle of Delegation of Authority. Centralization and decentralization of authority and its merits and demerits.

Co-ordination & Controlling: Meaning, Concept and principles of Coordination, Internal & External Coordination. Meaning, concept and elements of control.

Unit IV

Recent trends in management:

Management of Change Management of Crisis, Total Quality Management, Stress Management, International Management.

Suggested Books:

- 1. Bajaj: Management Processing and Organization, Excel Publications.
- 2. Tripathy and Reddy Principles of Management Tata McGraw Hill.
- 3. A. Pardhasaradhy & R. Satya Raju: Management Text and Cases, Prentice Hall of India.

Gulhane, Chopade Choudhary- Business Management, Sheth Publishers Pvt. Ltd. Mumbai

- 4- lq/kk] th-,l- Jhekyh fot;% O;kofk;d izcaU/k ds fl/nkar] jes'k cwd fMisk]ubZ fnYyh
- 5- 'kekZ] th-Mh-lwukuk] th-lh-% izcaU/k ds fl/nkar] jes'k cwd fMiks]ubZ fnYyh
- 6- ns'keq[k] izHkkdj% O;olk; O;oLFkkiukph ewy rRos] fiaiGkiwjs vaM da- ukxigjs



Question Paper Pattern Semester-II

2T2-Business Management

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time	:- 3 h	nours	Marks-80	
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16 Marks
0.2				
Q.2.	(a)	UNIT – II		08 Marks
	(a) (b)	UNIT – II		08 Marks
	(0)	ONII – II	OR	00 Marks
	(c)	UNIT – II	OK	16 Marks
	(-)			
Q.3.				
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – III		16 Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	1634.1
	(c)	UNIT – IV		16 Marks
Q.5.				
Q.J.	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	,	UNIT – III UNIT – IV		04 Marks
	d)	UNII – IV		U4 IVIAIKS



2T3: Secretarial Practice

Level of Knowledge: - Book Conceptual Knowledge.

Objective: To make aware the student with various function, duties and responsibilities of company secretary and Secretarial Practice

[The Company Act 2013 with Amendments up to June 2016]

UNIT – I

- (i) Procedure for Incorporation of Companies, Conversion of Companies Private Limited to Public Limited and Public Limited to Private Limited
- (ii) Procedure for Alteration of Memorandum of Association and Article of Association
- (i) Company Secretary Meaning, Qualification and Functions/ Role
- (ii) Directors Procedure for Appointment of Directors and Director's Identification Number (DIN)- allotment and surrender

UNIT- II

- (i) Types and characteristics of company meeting, statutory, board, general and extra ordinary meeting, and meetings of committee of director.
- (ii) Agenda, Notice and provision regarding quorum of Board meeting, Annual General Meeting and Extra ordinary General Meeting
- (iii) Voting and resolution- Meaning of poll, postal ballot and E-Voting, Meaning of ordinary and Special Resolution.
- (iv) Circular Resolution, Explanatory statement, Ordinary and special Business to be transacted in meetings.

UNIT – III

- (i) Report Writing Essential and content of Board Report and Annual Report.
- (ii) Concept of secretarial audit, Secretarial standards, corporate social responsibility and corporate governance, National Financial Reporting Authority.
- (iii) E-Governance and E-Filling- Meaning, features and procedure of E-Governance and E-Filling, MCA-21

UNIT - IV

- (i) Key managerial personnel- Appointment and function of managing director, whole time director and manager.
- (ii) Procedure for appointment of Additional Directors, Alternate Directors, Nominee Directors.
- (iii) Managerial Remuneration Remuneration of managing director, whole time director or manager.
- (iv) Provisions regarding resignation, removal of directors, Casual vacancy.



Reference Books:

- Company Law, Ashok K. Bagrial: Vikas Publication House
- Ratan Nolakha: Company Law And Practice, Vikas Publication House
- Gulshan, S S and Kapoor, G K: Business Law Including Company Law, New Age International (P) Ltd., Publishers
- Dr. Arvind shende, Dr. Asha Tiwari, Company Law & Secretarial Practice, Anuradha prakashan, Nagpur.
- Faroq Haque Secretarial Practice., Sheth Publishers Pvt. Ltd. Mumbai
- Kapoor G.K. and Dhamija Sanjay: Company Law -A comprehensive Textbook on New Companies Act 2013, Tazman Publication
- Secretarial Practice & Company Law- Arunkumar, Rachana Sharma- Atlantic Publishers and Distributors
- Secretarial Practice, M. C. Kuchhal, S. Chand Publishing.



QUESTION PAPER PATTERS SEMISTER II 2T3-SECRETARIAL PRACTICE

	TIME:	:- 3 Hours]		[Full Marks:- 80
			N.B 1) All questions are compulsory.	
			2) All questions carry equal marks.	
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16 Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II	0.7	08 Marks
			OR	
	(c)	UNIT – II		16 Marks
Q.3.	()			00.14.1
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III	OB	08 Marks
	(-)		OR	1.6 Ma dan
0.4	(c)	UNIT – III		16 Marks
Q.4.	(a)	UNIT – IV		08 Marks
	(a) (b)	UNIT – IV UNIT – IV		08 Marks
	(0)	OMII – IV	OR	UO IVIAIKS
	(c)	UNIT – IV	OK	16 Marks
Q.5.	(C)	ONII – IV		10 Marks
Q.5.	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – II		04 Marks
	d)	UNIT – IV		04 Marks



2T4: Business Economics – II

Unit I: Market Structure

Meaning, Definition, Classification of Market Structures. Firm & Industry- Meaning, Difference between Industry and Firm. Pricing of Products-Types, Cost-based pricing, Customer-based pricing, Competitor-based pricing.

Unit II: Perfect & Imperfect Competition Markets

Definition, Features, Price-output determination under Perfect Competition Market. Monopoly - Definition, Features, Types, Price determination under Monopoly. Concept of Price Discrimination .Monopolistic Competition- Meaning, Features, Price determination under Monopolistic Competition.

Unit III: Theories of Distribution

Theory of Distribution -Modern Theory of Distribution. Theories of Rent- Ricardian theory of Rent, Modern theory of Rent, Concept of Quasi Rent. Theory of Wages- Marginal Productivity theory of Wages with Criticisms, Nominal & Real wages. Theories of Interest-Loanable Funds Theory of Interest, Liquidity Preference Theory of Interest, Criticisms, Concept of Gross Interest & Net Interest. Theories of Profit- Dynamic Theory of Profit, Innovation Theory of Profit, Criticisms of the Theories, Gross Profit & Net Profit.

Unit IV- Business Cycles & National Income

Business Cycles-Concept, Features, Types, Phases of Business Cycles. National Income - Meaning, Concepts, Methods of Measuring National Income, Difficulties in National Income Accounting.

Books Recommended:

- 1. Business Economics, V.G. Mankar, Himalaya Publication House
- 2. Modern Economics, H.L.Ahuja, S.Chand & Co Ltd.
- 3. Micro Economics P.N.Chopra, Kalyani Publishers.
- 4. Micro Economics, D.D.Chaturvedi, Galgotia Publishing Company.
- 5. Modern Economic Theory, K.K.Dewett, S.Chand & Co Ltd.
- 6. Business economics, Dr. Arvind Shende, Dr. R. Ingole, Dr. P. Kothiwale, Anuradha Prakashan, Nagpur
- 7. Managerial Economics, D.N.Dwivedi, Vikas Publishing House Pvt Ltd.
- 8. Managerial Economics-Theory & Applications, D.M.Mithani, Himalaya Publishing House.
- 9. Business Economics by Ms. V. Karkare, Mrs. S Ghate, Anuradha Prakashan Nagpur.
- 1. Business Ecomomics, Rashi Arora, Sheth Publishers, Mumbai



Question Paper Pattern Semester-II

2T4-Business Economics - II

N.B.-1) All questions are compulsory. 2) All questions carry equal marks.

Time :- 3	3 hours	Marks-80	
Q.1.			
(a)	UNIT – I		08 Marks
(b)	UNIT – I		08 Marks
		OR	
(c)	UNIT – I		16 Marks
Q.2.			
Q.2. (a)	UNIT – II		08 Marks
(b)			08 Marks
		OR	
(c)	UNIT – II		16 Marks
Q.3.			
(a)	UNIT – III		08 Marks
(b)	UNIT – III		08 Marks
		OR	
(c)	UNIT – III		16 Marks
Q.4.	TO THE TAI		0034.1
(a)			08 Marks
(b)	UNIT – IV	OR	08 Marks
(c)	UNIT – IV	OK	16 Marks
Q.5.			
a)	UNIT – I		04 Marks
b)	UNIT – II		04 Marks
c)	UNIT – III		04Marks
d)	UNIT – IV		04 Marks



Allocation of marks for the subjects-

- 1. Statistics and Business Mathematics
- 2. Business Management
- 3. Secretarial Practice and
- 4. Business Economics-II

1a	Two periodical class tests		10marks
1b	An assign	10marks	
	be assesse		
1		Internal assessment Total marks	20 marks
2	Unit- I	20 marks	
	Unit-II	20 marks	
	Unit-III	20 marks	
	Unit-IV	20 marks	
		Semester wise End Examination marks	
			80 marks
		Total marks per subject	100 marks



Semester-II 2T5-Compulsory English

Unit -I Short Stories

- 1. Some Day by Issac Asimov
- 2. Marriage is a private affair by Chinua Achebe
- 3. The Taxi Driver by Kartar Singh Duggal

Unit -II Poems

- 1. Art of Life by Tukadoji from Gramgeeta (Translation by Dr. Bhelkar)
- 2. Horses Graze by Gwendolyn Brooks
- 3. Swan and Shadow by John Hollander

Unit -III Essays

- 1. Knowledge and Wisdom by Bertrand Russell
- 2. On education by Albert Einstein
- 3. What is Indianness? by Shelia Dhar

Unit -IV

A)a. Degrees of Comparison b. Words often Confused

B) Business Correspondence:

Sales Letter, Inviting Quotations, Placing Orders

- C) Comprehension of an Unseen Passage
- D) Essay in about 300 words on any one Topics out of the Four Given Topics [Social issues,

Economic issues, Environmental issues, Personal (Reflective) essays]

Prescribed Textfor UNITS I, II & III: Swan and Pearls (Raghav Publishers)

Reference Books:

For UNIT IV (A) (Grammar /Vocabulary items)

1.Learner's English Grammar & Composition by Dr. N.D.V.Prasada Rao (S.Chand)

For Unit IV (B)

- 2. Business Correspondence and Report Writing R.C.Sharma & Krishna Mohan (Tata McGraw-Hill)
- 3 Developing Communication Skills Krishna Mohan & Meera Banerji



2T5-Compulsory English SEMESTER – II Question Paper Pattern

Q 1. A. One LAQ out of Two based on Short Stories (Unit I)	08 Marks
B. Two SAQs with internal choice based on Short Stories (Unit	t I) 2 x 4 Marks - 08 Marks
Q 2. A. One LAQ out of Two based on prescribed poems (Unit II)	08 Marks
B. One LAQ out of Two based on the prescribed Essays (Unit III	I) 08 Marks
Q 3. A. Two SAQs with Internal Choice from Unit III	$(2 \times 4 \text{ Marks}) = 08 \text{ Marks}$
B. (i) Degrees of Comparison – 4 out of 6 - 4 x 1 Marks	08 Marks
(ii) Words often confused – 4 out of 6 - 4 x 1 Marks	04 Marks
Q 4. A. One out of Two items based on Business Correspondence (Ur	nit IV) 04 Marks
B. Comprehension of Unseen Passage – 4 VSAQs – 4 x 2 Marks	08 Marks
Q 5. A. Essay in about 300 words (1 out of 4 topics)	08 Marks
B. Four VSAQs based on Unit I and Unit III	$(4\times2 \text{ Marks}) = 08 \text{ Marks}$

Total = 80 Marks

- N.B. LAQ Long Answer Question to be answered in about 150 words.
 - SAQ Short Answer Question to be answered in about 75 words.
 - VSAQ Very Short Answer Question to be answered in one or two sentences.

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline. Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments – 6+6 = 12 Marks Performance & Conduct – 4 Marks Attendance - 4 Marks TOTAL – 20 MARKS



2T8.1-Supplementary English

Semester - II

Unit 1- Prose

- 1. Using the Dictionary- Albert Walker and Mary R. Parkman
- 2. On the Rule of the Road- A.G. Gardiner
- 3. How I became a Public Speaker- George Bernard Shaw
- 4. Seeing People Off- Sir Max Beerbohm
- 5. The Postmaster- Rabindranath Tagore

Unit 2 - Poetry

- 1. The Daffodils- William Wordsworth
- 2. Stopping by Woods on a Snowy Evening- Robert Frost

Unit 3 Non-Textual Portion

(A) Social Correspondence:

- Letter of Recommendation
- Letter of Introduction
- Making reservations in hotels for accommodation

(B) Note making:

- Serial or sequential format
- Tree diagram

Unit 4 – Grammar

Spotting errors in the use of- (1) Prepositions s (2) Tenses

Prescribed Text- Zenith- An Anthology of Prose and Poetry (Raghav Publishers) **For Unit I** and **II**

Reference books

- 1. Macmillan Foundation English R.K. Dwivedi, A. Kumar (For Unit IV)
- 2. Developing Communication Skills -- Krishna Mohan & Meera Banerji (Macmillan

Publishers) (For the topic 'Social Correspondence' under Unit III)

3. Write Right by Sarita Manuja (Macmillian Publication) (For the topic 'Note Making' under unit III)



2T8.1-Supplementary English Question Paper Pattern

Semester - II

Q 1.

(C) Unit 1 Prose - LAQ 150 words (2 out of 4) $2 \times 08 = 16$ marks

Q 2.

(D) Unit 1 Prose - SAQ 75 words(4 out of 5) $4 \times 4 = 16$ marks

Q 3.

(A) Unit 2 Poetry- LAQ 150 words (1 out of 2) $1 \times 08 = 08$ marks

(B) Unit 2 Poetry - SAQ 75 words (2 out of 3) $2 \times 4 = 08$ marks

Q 4.

Non-textual portion

(A) Social Correspondence: 1 x 08= 08Marks

(B) i. Correct the error in the use of prepositions (4 out 5) $04 \times 1 = 04$ Marks

ii. Correct the error in the use of the tense (4 out 5) 04 x 1= 04 Marks

Q 5.

(A) Note Making $1 \times 08 = 08$ Marks

(B) VSAQs Units 1 & 2

Answer each of the following in one or two lines 4X2 Marks = 08 Marks

Total Marks of Theory Examination-80

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The

concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.

Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments – 6+6 = 12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS

Theory Examination – 80 Marks Internal Assessment – 20 Marks Total: 100 Marks



2T8.2-विषय : मराठी

सत्र दुसरे

प्रश्न क्र.	घटक क्र.	अभ्यासक्रम	गुण	शेरा
ę	8	आत्मवृत्तपर, वर्णनपर, विषयांवर आधारित निबंध (चार पर्यायांपैकी एका विषयावर शब्द मर्यादा-४००)	२०	
₹	2	गद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन भाग एक १ जेट युगातील मराठी माणूस (शंतन् किर्लोस्कर) २ विव्वल तो आला आला (पु. ल. देशपांडे) ३ नवसमाजनिर्मितीचे प्रणेते: महात्मा ज्योतीबा फुले (गंगाधर पानतावणे) ४ भरती (वसंत वन्हाडपांडे) ५ महालूट (संदानंद देशमुख)	34	
3	3	पद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन भाग एक १ तुकारामांचे अभंग (संत तुकाराम) २ प्रेमाचा गुलकंद (केशव कुमार) ३ पृथ्वीचे प्रेमगीत (कुसुमाग्रज्) ४ स्वप्न (ग्रेस) ५ दोन कामागारांच्या गोष्टी (लोकनाथ यशवंत)	34	
8	8	व्यावहारिक मराठी ३. मुलाखत तंत्र ४. म्हणी व वाक्प्रचार	१०	



2T8.2-विषय: मराठी

प्रश्न पत्रिकेचे स्वरूप

सत्र : दुसरे

वेळ:३ तास)

(एकूण गुण- 80

प्रश्न:१ आत्मवृत्तपर, वर्णनपर निबंध (चार पर्यायांपैकी एका विषयावर)

शब्दमर्यादा- ४०० शब्द

(16 गुण

प्रश्न: २ गद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 गुण)

प्रश्न: ३ पद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 ग्ण)

प्रश्नः ४ दोन गद्य विभागावर व दोन पद्य विभागावर आधारित चार लघु प्रश्नांच्या दोन गटांपैकी एक गट सोडवा (16 गुण)

प्रश्नः ५ एक लघु प्रश्न गद्य विभागवर, एक लघु प्रश्न पद्य विभागावर आणि दोन लघु प्रश्न व्यावहारिक मराठीवर आधारित अशा चार लघ् प्रश्नांची उत्तरे लिहा (16 गुण)

एकूण गुण विभागणी

- १. गद्य विभाग 28 गुण
- २. पद्य विभाग 28 गुण
- 3. व्यव्हारिक मराठी 08 ग्ण
- ४. निबंध 16 ग्ण

एकूण गुण : 80

अंतर्गत मूल्यांकन गुण २०: संबंधित महाविद्यालयातील प्राध्यापकांनी परीक्षार्थ्याची वर्गातील उपस्थिती (०५ गुण), परीक्षार्थ्याचा वर्गातील सक्रीय सहभाग (०५ गुण) आणि लिखित स्वरूपातील गृह पाठ (१० गुण) या निकषांवर एकूण २० गुणांपैकी विद्यार्थ्यांचे अंतर्गत मूल्यांकन करणे.

सत्र लेखी परीक्षा : ८० गुण अंतर्गत मूल्यांकन : २० गुण एकूण गुण : १००



2T8.3-fo"k;%& fgUnh f}rh; l= % Semester II

le;%& rhu ?kaVs

dqy vad%&100

bdkbZ	bdkb;ksa (Units) dk ikB∼;Øe Øekuqlkj	vad
Øekad		
(Units)		
bdkbZ 1	Tkhouh] o.kZukRed rFkk 'kS{kf.kd fo"k;ksa ij	20
(Unit-1)	vk/kkfjr fuca/kA	
	¼ fdUgh pkj esa ls ,d fo"k; ij & 'kCn lhek 400 rd½	
bdkbZ 2		
(Unit-2)	Xk foHkkx%& ikB~;iqLrd%& ^^lkfgR; ohfFkdk**	
		35
	1½ âf"kds'k eq[kthZ ds lkFk <kbz &="" euksgj<="" fnu="" lalej.k&="" th=""><th></th></kbz>	
	';ke tks'kh	
	2½ lk;kZoj.k vkSj ge & fuca/k & jktho xxZ	
	3½ lkbcj dkSrqd & ,dkadh & e/kq /kou	
	4½ jkr ak jgl; & ,akaan & ivikvv- jkeaqekj oekz	
bdkbZ 3	5½ baLisDVj ekrknhu pkin ij & O;aX; & gfj'kadj ijlkbZ	
(Unit-3)		35
	i foHkkx%& ikB~;iqLrd%& ^^lkfgR; ohfFkdk**	
	1½ Bqdjk nks ;k I;kj djks & lqHknzkdqekjh	
	pkSgku	
	2½ dye vkSj ryokj & jke/kkjhflag ^fnudj*	
	3½ /kwi pedrh gS pkinh dh lkMh igus & dsnkjukFk	
bdkbZ 4	,	
(Unit-4)	4½ chrs fnu dc vkus okys & gfjoa'kjk; cPpu	
	5½ i`Foh fdlfy, ?kwerh jgh & v#.k dey	10
	vU; ikB~; lkexzh%&	
	1½ eqgkojs vkSj yksdksfDr;k; &ikB~;iqLrd esa lyaXu	
	eqgkojs vkSj yksdksfDr;ksa dk vFkZ ,oa okD; iz;ksx dk	
	v/;;u visf{kr gSA	
	$2\frac{1}{2}$ i= ys[ku& izdkj]xq.k] fo'ks"krk,j] izk:i] dk;kZy;hu i=]	



dk;kZy; Kkiu] dk;kZy; vkns'k] ifji=d] v/kZljdkjh i=½blesa vkosnu]fu;qfDr] chek] cSad] Kkiu] fufonk oLrqvksa dsa Ø;]&foØ;] izkflr ,oa lwpuk i=] vkns'k i=½ bR;kfn lkexzh v/;;u vkSj v/;kiu ds ek/;e ls rS;kj dh tk;sA	
--	--



f}rh; l= % Semester II 2T8.3-fo"k;%& fgUnh

le;%& rhu ?kaVs

dqy vad%- 80

iz'u&1 Tkhouh] o.kZukRed rFkk 'kS{kf.kd fo"k;ksa ij vk/kkfjr fuca/kA vad&16

1/4 fdUgh pkj esa ls ,d fo"k; ij & 'kCn lhek 400 rd1/2

iz'u&2x|& foHkkx ij vk/kkfjr ikBksa esa ls fodYi ds lkFk nh?kksZRrjh iz'uA vad&16

1/4nks iz'uksa esa ls ,d iz'u dk mRrj visf{kr gSA1/2

iz'u&3i|& foHkkx ij vk/kkfjr dforkvksa esa ls fodYi ds lkFk nh?kksZRrjh iz'u A vad&16

1/4nks iz'uksa esa ls ,d iz'u dk mRrj visf{kr gSA1/2

iz'u&4rhu x|&foHkkx lss o rhu i|& foHkkx ij vk/kkfjr dqy Ng y?kq iz'uksa esa ls fdUgha pkj iz'uksa ds mRrj visf{kr gS A 4vad =vad&16

iz'u&5blds vUrxZr lEiw.kZ ikB~;Øe ls pkj y?kqRrjh iz'u gksaxsaA **izFke iz'u** x| ls] f}rh; iz'u i| ls] r`rh; iz'u eqgkojs vkSj yksdksfDr;ksa ls vkSj prqFkZ iz'u i=&ys[ku ls iwNs tk;saxsAlHkh iz'uksa ds mRrj visf{kr gSA

4 x 4vad =vad&16

vkUrfjd ewY;kdau & 20 vad dqy vad foHkktu%&

fucU/k&16 vad
x| foHkkx & 28 vad
i| foHkkx &28 vad
vU; ikB~; lkexzh& 08 vad
dqy vad & 80 vad



Vocational Course Semester II

(Same syllabus for all vocational group subjects in B.Com – I) 2T7:Entrepreneurial Development-I

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Level of knowledge: Basic knowledge

Objective: To provide an introductory knowledge about rural entrepreneurship and its development process.

Unit I

Rural entrepreneurship-meaning and need of Rural entrepreneurship, problems of Rural entrepreneurship and how to develop Rural entrepreneurship?, rural marketing potential marketing of agricultural inputs-warehousing, cold storage-importance and problems,

Unit II

NGO's and Rural entrepreneurship, entrepreneurship in agriculture, organization and management of agro-based industries, development strategy for Rural entrepreneurs, entrepreneurial development in backward areas.

Unit III

Entrepreneurial growth before and after independence, Factors determining the growth of entrepreneurs, Source of entrepreneurship in India, Causes of slow growth

Unit IV

The concept and need of Entrepreneurial development programmes in India, Phases and contents of Entrepreneurial development programmes in India, the target group, special agencies and schemes for Entrepreneurial Development Institutions conducting Entrepreneurship development programmes.

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande: Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.
- ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.



Group – I : Computer Applications

2T8.1 : Software Packages (SP)

Marks

Time: 3 Hours

Practical: 20 Marks

Theory: 80

<u>Unit –I : Introduction to Word Processing</u>

Introduction, Starting word, Creating document, Structure of Ms-word window and its application, Mouse & keyboard operations, designing a document; formatting-selection, cut,

copy, paste, Toolbars, operating on text;

Unit –II : Word Processing Tools

Printing, Saving, Opening, Closing of document; creating a template; Tables, borders, textbox

operations; Spelling and Grammar check,

Mail Merge, Envelope and Label, Protection of document, Change the view of document.

Unit-III: Introduction to Excel

Introduction To Ms-Excel, Navigating, Excel Toolbars and Operations, Formatting Features-

Copying Data Between Worksheets; Entering and Editing Cell Entries,

Unit-IV: Advance Features of Excel

Creation of Charts, Editing and Formatting Charts, Goal Seek, Auditing, Linking, Workbook,

Database in Excel (Auto Filter, Advanced Filter, Sort, Form), Mathematical, Statistical and

Financial Functions in MS-Excel.

Practical: Practical will be based on MS-Word and MS-Excel

Books Recommended:

1. Microsoft Office –2000 – Gini Courter, Annelte Marquis BPB

2. IT Today (Encyclopaedia) – S.Jaiswal

3. A First Course In Computers – Sanjay Saxena

4. First Text Book On Information Technology – Srikant Patnaik

20 (03/2021 20 (03/2021 S.S. Maniar College, Nagpun

46

Group -: Principles & Practice of Insurance 2T8.2-Life Insurance - Paper II (Semester - II)

Time: 3 Hours Theory: 80 Marks

Internal Assessment: 20

Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about Life Insurance.

Unit - I

Insurance Agent – Meaning and Definition of agent as per Insurance Act, Qualification and Disqualification for Appointment of Life Insurance Agent Training, duties, rights, code of conduct for agents, essential qualities for a successful agent.

Unit -II

Life Insurance Corporation of India(LIC) – History and Development and Establishment, Objectives, Organization structure , working of LIC Accounting procedure in life insurance business, analysis and interpretation of financial statement of life insurance organization

Unit -III

Role of IRDA – Insurance regulatory and development authority – Constitution, objectives, duties and powers, Role of IRDA in appointing agents.

Progress of Life Insurance Business, Privatisation of Life Insurance Business, effect of globalization on insurance sector

Unit - IV

Silent features of Insurance Act 1938

Silent features of Life Insurance Corporation Act 1956

Marketing strategies of Life Insurance Products, insurance funds, investment of life, insurance funds

Recommended books:

- Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.
- Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House
- Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication
- Principles of Insurance, Dr. Shakti Pratchbal and Dr. N.P. Dwivedi, Himalaya Publishing House
- 🗸 बीमा के सिध्दांत एवं व्यवहार भगवती प्रकाळा अर्मा, राजीव जैन, पुरुशोत्तम दयाल— हिमालया प्रक्लिळिंग हाऊस
 - ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.



Semester - II 2T8.3-Advertising, Sale Promotion and Sales Management - II

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Unit-1

Building of Advertising Programme-Message, Headlines, Copy, Logo, Illustration, Appeal, layout Campaign Planning. Creative Strategies. Production and execution of TVCs and print ads.

Unit-2

Sales Promotion – Introduction to Sales Promotion; Role and growth of Sales Promotion; its Features and Purpose; Tools and Techniques of Sales promotion, Sales promotion campaign, Developing a logic for sales promotion programmes.

Unit-3

- Role of selling in planed economy, selling as a career, Acquiring skills and developing new qualities for salesmen and to improve growth chances,

Unit-4

Tips and suggestions to improve personal ability, skills for salesmen, product knowledge, planned selling system.

Recommended books:

- ✓ Luick, John F and Siegler, William Lee, Sales promotion and Modern Merchandising (McGraw Hill Book Co., New York, 1968)
- ✓ Still, Richard, Edward W & Govoni Norman AP, Sales management Decisions, Strategies and cases (Prentice Hall India Pvt. Ltd., New Delhi, 1981)
- ✓ Stanton, William J & Buskrit, management of Sales Force (Richard D, Irwin, Inc. Homewood, 1987)
- ✓ Russell, Frederic A. Beach, Frank H & Buskrit, Richard H, Selling principles and Practices (Mcgraw Hill, International Book Co.1982)
- ✓ David Aaker, Advertising management (Prentice Hall India Pvt. Ltd., New Delhi)
 - ✓ Kazmi & Batra, Advertising & Sales Promotion Excel Books.
 - ✓ Belch & Belch, Advertising & Promotion Tata McGrow Hill.
 - ✓ Jethwaney & Jain Advertising Management, Oxford Univ. Press



SEMESTER II QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development &ASM

TIME:	- 3 Hours]		[Full Marks:- 80
		N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.	
Q.1.(a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT - I		8 Marks
(d)	UNIT – I		8 Marks
Q.2. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.3. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.4. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.5. Answer	r in Brief		
(a)	UNIT – I		4 Marks
(b)	UNIT – II		4 Marks
(c)	UNIT – III		4 Marks
(d)	UNIT – IV		4 Marks



B. Com. Second Year Semester- III 3T1 – : Financial Accounting – II

Unit - I

Consignment Accounts.

Meaning, Needs, Advantages and Formalities in consignment, Difference between a consignment and a sale, Performa invoice, Account Sales, Accounting Procedure of Consignment, Valuation of Consignment Stock. (Theory & Numerical)

Unit – II

Branch Accounts (Excluding Foreign Branch)

Meaning of Branch, Objectives of Branch Accounting, Maintenance of Accounting Records, Transactions relating to Branch. Accounting Procedure of Branch (Theory & Numerical)

Unit – III

Flotation of Joint Stock Companies and their Capital Structure.

Types of Shares, Methods of issue of shares, Accounting for Issue, Forfeiture of shares & reissue of forfeited shares (Theory & Numerical)

Unit - IV

Final Accounts of Joint Stock Companies

Introduction, Statutory provisions regarding preparation of companies final accounts. Provision for interest on debentures, Proposed Dividends, Interim Dividend (**Theory & Numerical**)

The financial year ends on 31st March.

Reference Books:

- Corporate Accounting:-Maheshwari S N, VikasPublishing house Pvt. Ltd.
- Advanced Financial Accounting, Gupta R. L., S. Chand Publishing
- Advanced Accounts Shukla and Grewal: (S. Chand & Ltd. New Delhi)
- Advanced Accounts, Jain and Narang: (Kalyani Publishers, Ludhiana)
- Accountancy, Volume –I and II ,Sr. K. Paul : (New Central Book Agency, Kolkata)
- Accounting Theory, R. K. Lele and Jawaharlal: (Himalaya Publishers)
- Accounting Theory, Dr. L. S. Porwal: (Tata McGraw Hill)
- Corporate Accounting Dr. S. N. Maheshwari : (Viakas Publishing House Pvt. Lit. New Heldi)
- Advanced Financial Accounting ,Dr. Ashok Sehgal & Dr. Deepak Sehgal : (Taxmann, New Delhi)
- Advanced Financial Accointing Dr. R. D. Mehta, Prof. P. Wath & Dr. D. C. Gotmare ,Payal Prakashan, Nagpur.



Question Paper Pattern Semester-III

3T1 -Financial Accounting – II

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours		Marks-80
O No 1 Unit I		
Q. No. 1 – Unit I	a) Theory	08 Marks
	a) Theoryb) Problem	08 Marks
	OR	OO WAIKS
	c) Problem	16Marks
	c) Hoolem	TOMERS
Q. No. 2 – Unit II		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 3 – Unit III	. —	
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	46.15.1
	c) Problem	16 Marks
Q. No. 4 – Unit I		
Q. 1.01 . C	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 5	a) Unit- I	Problem 04 Marks
-	b) Unit –II	Problem 04 Marks
	c) Unit-III	Problem 04Marks
	d) Unit-IV	Problem 04 Marks



3T2: Business Communication & Management

Unit – I: Introduction

Meaning, Definition and concept of Communication, Objectives of Communication, Functions of communication Written Communication, Oral Communication, Visual Communication, Audio Visual Communication, interpersonal communication, supervisory communication, grapevine communication, barrier in communication

Unit – II: Business communication

Business communication: concept, objective, elements, purpose, importance, salient feature, principles of effective business communication.

customer care communication In business

Types of business communication-company manual, house journal, placement broacher, leaflets, E MAIL. Public Relations Management- Role of public relations officer in business, group discussion,

Unit-III: Technology and business communication

Concept of Management Information System, Role of Computer in communication, Barriers of computerized Communication –Use of internet, website and electronic media in business communication. Social media as a mean of communication.

Unit-IV:

MS-office aided communication: MS Word and its application in business communication, Role of MS-Excel and MS-Power point in communication skill, MS-excel and financial presentation, MS-power point and business communication, Use of MS-power point in business meeting as a tools of effective communication.

Suggested Books:

- 1. A guide to business correspondence- Kapoor A- S Chand & Co
- 2.. Urmila Rai & S.M. Rai, Business Communication, Himalya Publishers,
- 3. Lesikar I Flatley, Basic Business Communication, Tata McGraw Hill.
- 4. Microsoft office-2000/2007- Gini courter, annelte Marquis BPB
- 5. Business Communication, Dr. Arvind Shende, Dr. Asha Tiwari, Anuradha Prakashan, Nagpur.
- 5. Business Communication, Pooja Khanna, S. Chand Publishing.
- 5. dwekj] fojsUnz % O;kolkf;d lapkj] dY;k.kh ifCy'klZ]ubZ fnYyh

6-pwMkor] nfj;ko flag] O;olkf;d lapkj] jes'k cwd fMiks]ubZ fnYyh

7-f'kans] ih-,e-% ekfgrh ra=Kku vkf.k O;olk; mi;kstuk]dSyk'k ifCyds'kUl]vkSjkaxkckn



3T2-Business Communication & Management Paper - II Question Paper Pattern

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours Marks-80

Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.		******		0037.1
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II	OB	08 Marks
	()	TINITE II	OR	101.1
	(c)	UNIT – II		16Marks
Q.3.				
Ç	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – III		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV	0.7	08 Marks
		1 D 1770 - 117	OR	101.1
	(c)	UNIT – IV		16Marks
Q.5.				
<u></u>	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



3T3– III: Business Law

Level of Knowledge: Basic Conceptual Knowledge

Objective: To make students aware about various Laws relating to Business

[with amendments up to June 2016 in respective Acts]

Unit-I (i)Business law: Meaning, evolution and significance

- (ii) Law relating to Contract (Indian Contract Act-1872): important definitions, nature and kinds of contract, essentials of a valid contract, offer and acceptance, consideration, capacities of parties to contract, free consent.
- (iii) Void Agreement, Contingent Contract, Quasi Contract
- (iv) Contract of Indemnity and Guarantee, Law of Agency.

Unit-II

- (i) Law relating to Sale of Goods- (Sale of Goods Act- 1930): contract of sale of goods, Essentials of a contract of sale, concept of goods, sale distinguished from agreement to sell, difference between conditions and warranties; transfer of ownership and delivery of goods, unpaid seller his rights against the goods and the buyer.
- (ii) Law relating to Partnership- (the Indian partnership act 1932): concept of partnership and partnership firm, types of partner, types of partnership.
- (iii) Registration of partnership firm, effect of non registration, partnership deed, duties and liabilities of partners including those of newly admitted partners, dissolution of partnership firms.

Unit-III

- (i) Law relating to Negotiable Instruments -(Negotiable Instrument Act-1881): Meaning and Definition of Negotiable instruments, Promissory Notes, Bills of Exchange and its Types, Cheques and Its types, Crossing of Cheques.
- (ii) Endorsements: Meaning and Types, Holder and Holder in due course and its rights, Discharge of Negotiable Instruments.
- (iii) Parties to a Negotiable Instrument duties, rights, and liabilities
- (iv) Prevention of Money Laundering Act-2002: Objectives, Important Definitions and Salient Features.

Unit-IV

(i) Law relating to Consumer protection in India - (Consumer Protection Act-1986): Definition of Consumer, Importance of Consumer, Problems faced by Consumers, Consumer Protection- Need & Importance, Rights & Responsibilities of Consumer



- (ii) Definitions: Complaints, Services, Defects & Deficiency, Relief available to consumer, Procedure to file complaints, ways and means of consumer protection, consumer dispute redresser agencies and procedure followed by redresser agencies.
- (iv) Law Relating to Information Technology- (Information Technology Act-2000): Objectives, scope and Important Terms, Digital Signature & Electronic Records, Certifying Authority, Digital Signature Certificates, offense and Penalties.
- (iv) Cyber Law: Meaning, Important Definitions, Features, Need and Importance of cyber Law in India

Reference Books:

- Gulshan, S S and Kapoor, G K: Business Law Including Company Law, New Age International (P) Ltd., Publishers
- M.C. Kuchhal and Vivek Kuchhal: Business Law, Vikas Publishing House, New Delhi
- V.S. Datey: Business and Corporate Laws, Taxman, New Delhi
- N.D. Kapoor: Mercantile Law, Sultan Chand & Sons, Educational Publishers, New Delhi.
- Dr. V. K. Jain: Mercantile Law, Seth Publications, Nagpur.
- Business Law R.S. N. Pillai& V. Bhagavathi, S. Chand Publishing.
- Sen & Mitra: Cinnercuak Kawn, The World Press Pvt. Ltd., Kolkata.
- C.K. Kapoor: Lectures on Business and Corporate Laws, Vidya Sadan, Delhi.
- K.R. Bulchandani, Business Law Himalaya P. House, Mumbai-2006.
- Business Law, Dr. Arvind shende, Dr. Vijay Upgade, Anuradh Prakashan, Nagpur.



Question Paper Pattern 3T3-Business Law Paper - III

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time	e :- 3 l	nours		Marks-80
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
		**************************************	OR	
	(c)	UNIT – II		16Marks
0.2				
Q.3.	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
	(0)		OR	00 1741115
	(c)	UNIT – III		16Marks
Q.4.	. ,			
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT - IV		16Marks
0.5				
Q.5.	`	IDIM I		0434.1
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



3T4 MONETARY ECONOMICS-I

Unit I: Money

Evolution, Meaning, Definition, Nature and Functions of Money. Quantity Theory of Money and Criticisms. Paper Currency & Methods of Note Issue- Fixed Fiduciary Method, Proportionate Reserve Method, Minimum Reserve Method.

Unit II: Inflation & Deflation

Inflation- Meaning, Nature, Causes, Effects, Impact of Inflation. Deflation - Meaning, Nature, Causes, Effects, Impact of Deflation. Role of Monetary Policy and Fiscal Policy in controlling Inflation & Deflation.

Unit III: Money Market & Policies

Money Market- Concept of Money Market, Objectives, Importance of Money Market, Instruments of Money Market. Monetary Policy and Fiscal Policy Concept-Meaning, Objectives, Need, Importance, Impact, Recent Changes/Trends.

Unit IV: Public Finance

Concept, Meaning, Importance of Public Finance, Principles of Public Finance, Theory of Maximum Social Advantages & Criticisms. Taxation – Definition, Characteristics& Cannons. Types of Taxation-Proportional, Progressive and Regressive Taxation System .Direct and Indirect Taxes- Merits & Demerits.

Books Recommended:

- 1. Monetary Economics, RR Paul, Kalyani Publishers.
- 2. Money, Banking, Trade & Public Finance, M.V. Vaish, New Age International Pvt. Ltd.
- 3. Money, Banking and International Trade, K.P.M. Sundaram, Sultan Chand, New Delhi.
- 4. Public Finance, Tyagi, Jai Prakash Nath Publishers.
- 5. Money and Financial System P.K. Deshmukh, Phadke Prakashan.
- 6. Monetary Economics, Rashi Arora, Sheth Publishers, Mumbai
- 7. Modern Macroeconomics(Theory & Policy),B.N.Ghosh, Ane Books Pvt Ltd, 2nd Edition, 2012.
- 8. Macro Economics, D.D.Chaturvedi, Galgotia Publishing Company, 1999.



Question Paper Pattern Semester -III

3T4-Monetary Economics – I Paper - IV

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours Marks-80

Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
			OR	
	(c)	UNIT – II		16Marks
0.2				
Q.3.	(-)	TINITE III		00 Mayla
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III	OR	08 Marks
	(c)	UNIT – III	OK	16Marks
Q.4.	(C)			TOWATES
Q. + .	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
	(0)	OTVIT TV	OR	00 Warks
	(c)	UNIT - IV	011	16Marks
	()			
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks
	,			



Allocation of marks for the subjects-

- 1. Financial Accounting -II
- 2. Business Communication and Management,
- 3. Business Law and
- 4. Monetary Economics-I

1a	Two perio	Two periodical class tests		
1b	An assigni	An assignment/Viva/Group Discussion/Seminar based on curriculum to		
	be assessed	be assessed by the teacher concerned		
1		Internal assessment Total marks	20 marks	
2	Unit- I	20 marks		
	Unit-II	20 marks		
	Unit-III	20 marks		
	Unit-IV	20 marks		
		Semester wise End Examination marks		
			80 marks	
		Total marks per subject	100 marks	



Semester-III

3T5-Compulsory English

Unit -I PROSE ITEMS FROM "BLOSSOMS"

- **1.**The Portrait of a Lady Khushwant Singh
- 2. Youth and the Tasks Ahead Karan Singh
- **3**.The Verger W.S.Maugham
- **4**. *The Eyes are not Here* Ruskin Bond

Unit -II POEMS FROM "BLOSSOMS"

- 1. Money Madness D.H. Lawrence
- 2. The Felling of the Banyan Tree Dilip Chitre
- 3. A River A.K.Ramanujan

Unit -III

- (A)Comprehension of UnseenPassage
- (B)Transformation of Sentences:
- **a**. Affirmative –Negative and vice-versa
- **b**.Interrogative Assertive and vice-versa

Unit -IV

(A) Business Correspondence:

Claim and Adjustment Letters - Making Claims/Offering Adjustments

(B)Drafting Agenda/Minutes of a Meeting

Prescribed Text: *Blossoms* (Raghav Publishers)

Reference Books (For Sem III & IV):

For Unit III – Learner's English Grammar and Composition – N.D.V.Prasada Rao (S.Chand)

For Unit IV – 1. Business Correspondence and Report Writing – R.C.Sharma & Krishna Mohan (Tata

2.Developing Communication Skills – Krishna Mohan & Meera Banerji (Macmillan) (Tata McGraw-Hill)



3T5-Compulsory English

Question Paper Pattern

Q 1. A. One LAQ out of Two based on Prose items (Unit I: Lesson No. 1 & 2)	08 Marks
B. One LAQ out of Two based on Prose items (Unit I: Lesson No 3 & 4)	08 Marks
Q 2. Four SAQs with internal choice based on prescribed Prose items (Unit I) (4 x 4 Marks)	16 Marks
Q 3. A. One LAQ out of Two from prescribed poems (Unit II)	08 Marks
B. Comprehension of Unseen Passage – 4 VSAQs –4 x 2 Marks Q 4. A. (i) Four items based on Unit III B (a) – 4 x 1 Mark -	08 Marks 04 Marks
(ii) Four items based on Unit III B (b) – 4 x 1 Mark -	04 Marks
B. One out of Two Questions based on Business Correspondence [Unit IV (A)]	08 Marks
Q 5. A. One out of Two Questions based on UNIT IV (B)	08 Marks
B. Four VSAQs based on Unit I and Unit III - (4×2 Marks)	08 Marks
Total = 80) Marks

- N.B. LAQ Long Answer Question to be answered in about 150 words.
 - SAQ Short Answer Question to be answered in about 75 words.
 - VSAQ Very Short Answer Questions to be answered in one or two sentences.

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.

Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments -6+6=12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS



3T6.1 - Supplementary English

Semester - III

Unit 1 - Prose

- 1. The Thief-Ruskin Bond
- 2. Three Hermits Leo Tolstoy
- 3. The Power of Prayer- A.P.J. Abdul Kalam
- 4. A Tryst with Destiny- Jawaharlal Nehru

Unit 2 - Poetry

- 1. Still I Rise- Maya Angelou
- 2. Ulysses Alfred, Lord Tennyson
- 3. Telephone Conversation- Wole Soyinka

Non-Textual Portion-

Unit 3- Writing Skills

- A) Report Writing
 - Inquiry Report
 - Progress Report

(B) Expansion of an Idea

Unit 4 - Vocabulary

(A) Business Terminology - Ad Valorem, Authorized Capital, Blue Chip, Benchmark, Credit Rating, Corporation, Debenture, Dividend, Excise Duty, Face Value, Fringe Benefits, Goodwill, Gross Profit, Inventory, Inflation, Joint Venture, Kickback, Lease, Mortgage, Patent, Portfolio, Running Costs, Surety, Social Security, Voucher

(Students to give the appropriate business term for the definition/ explanation given)

Prescribed Text- *Reflections*- A Supplementary English Coursebook for Undergraduates (Raghav Publishers)(**for unit I & II**)

Reference Books-

- 1. Professional Communication Roshan Lal Raina, Iftikhar Alam, Falzia Siddiqui. (Himalaya Publishing House) (For the topic 'Report Writing' under unit III)
- 2. Macmillan Foundation English R.K. Dwivedi, A. Kumar(for the topic 'Expansion of an Idea' under Unit III)
- 3. Business Correspondence & Report Writing- A practical approach to Business & Technical Communication- R.C. Sharma & Krishna Mohan Fourth Edition (McGraw Hill) (for the topic 'Business Terms' under Unit IV)



3T6.1 - Supplementary English

Question Paper Pattern

Q1.

(E) Unit 1 Prose - LAQ 150 words (2 out of 4) $2 \times 08 = 16 \text{ marks}$

Q 2.

(F) Unit 1 Prose - SAQ 75 words (4 out 5) 4 x 04 = 16 marks

Q 3.

(C) Unit 2 Poetry- LAQ 150 words- 1 out of 2 $1 \times 08 = 08$ marks (D) Unit 2 Poetry - SAQ 75 words- 2 out of 3 $2 \times 04 = 08$ marks

Q4.

(A) Unit 3- Report Writing 1X08 = 08 marks

(B) Unit 3- Expansion of an idea (1 out of 2) 1X 08 = 08 marks

Q 5.

(A) Business Terms (4 out of 6) 4x02 = 08 marks

(B) VSAQs from Unit 1 and Unit 2 4X02= 08 marks

Total Marks of Theory Examination-80

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.

Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments -6+6=12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS

Theory Examination – 80 Marks Internal Assessment – 20 Marks Total: 100 Marks



3T6.2-विषय : मराठी

सत्र तिसरे

प्रश्न क्र.	घटक क्र.	अभ्यासक्रम	गुण	शेरा
8	8	पर्यावरण, आध्निकज्ञानविज्ञान आणि	२०	
		प्रसार माध्यमे ह्या विषयांवर आधारित		
		निबंध (चार पैकी एक ; शब्द मर्यादा-४००		
)		
२	२	गद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन	39	
		भाग दोन		
		१ दुख:क्रांत लेंकी येणें (म्हाइंभट)		
		२ माझे दत्तक वडील (चि. वि.		
		जोशी)		
		३ सांगावा (शंकरराव खरात)		
		४ शेवटची माती (आनंद यादव)		
		५ जनसामान्यांच्या प्रबोधनाचं गतिचक्र		
		(बा. ह. कल्याणकर)		
3	3	पद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन	39	
		भाग दोन		
		१ संतवाणी (चोखामेळा, सेना		
		न्हावी, नरहरी सोनार)		
		२ लटपट लटपट तुझें चालणें (
		होनाजी बाळा)		
		३ माझी कन्या (बी.)		
		४ आभाळाची आम्ही लेकरे (वसंत		
		बापट)		
		५ इथेच (यशवंत मनोहर)		
		६ जहर खाऊ नका (ज्ञानेश वाकुडकर)		
8	8	व्यावहारिक मराठी	१०	
		१ प्रसारमाध्यमांसाठी वृत्तलेखन		
		२ कल्पना विस्तार		

3T6.2-विषय : मराठी

प्रश्न पत्रिकेचे स्वरूप

सत्र: तिसरे

वेळ:३ तास)

(एकूण गुण-80)

प्रश्नः १ पर्यावरण आधुनिक ज्ञानविज्ञान आणि या विषयावर आधारित निबंध (चार पर्यायांपैकी एका विषयावर)

शब्दमर्यादा- ४०० शब्द (16 गुण)

प्रश्न: २ गद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 गुण)

प्रश्न: ३ पद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 ग्ण)

प्रश्नः ४ दोन गद्य विभागावर व दोन पद्य विभागावर आधारित चार लघु प्रश्नांच्या दोन गटांपैकी एक गट सोडवा (16 गुण)

प्रश्न: ५ एक लघु प्रश्न गद्य विभागवर, एक लघु प्रश्न पद्य विभागावर आणि दोन लघु प्रश्न व्यावहारिक मराठीवर आधारित अशा चार लघु प्रश्नांची उत्तरे लिहा (16 गुण)

एकूण गुण विभागणी

- १. गद्य विभाग 28 गुण
- २. पद्य विभाग 28 गुण
- ३. व्यव्हारिक मराठी 08 ग्ण
- ४. निबंध 16 गुण

एकूण गुण : 80

अंतर्गत मूल्यांकन गुण २०: संबंधित महाविद्यालयातील प्राध्यापकांनी परीक्षार्थ्याची वर्गातील उपस्थिती (०५ गुण), परीक्षार्थ्याचा वर्गातील सक्रीय सहभाग (०५ गुण) आणि लिखित स्वरूपातील गृह पाठ (१० गुण) या निकषांवर एकूण २० गुणांपैकी विद्यार्थ्यांचे अंतर्गत मूल्यांकन करणे.

सत्र लेखी परीक्षा : ८० गुण

अंतर्गत मूल्यांकन : २० गुण एकूण गुण : १००

3T6.3-fo"k;%& fgUnh r`rh; l= % Semester III

le;%& rhu ?kaVs

dqy vad%&80

bdkbZ	bdkb;ksa (Units) dk ikB~;Øe Øekuqlkj	vad	
Øekad			
(Units)			
bdkbZ 1	Toyar leL;kvksa] vk/kqfud Kku&foKku rFkk izlkj	20	
(Unit-1)	ek/;e vkfn fo"k;ksa ij vk/kkfjr fuca/k A		
	1/4 fdUgh pkj esa ls ,d fo"k; ij & 'kCn lhek 400 rd1/2		
	Xk foHkkx %& ikB~;iqLrd%& ^^lkfgR; ohfFkdk	35	
(Unit-2)	&Hkkx&2**		
	1½ fgEer vkSj ftanxh & fuca/k& jke/kkjh flag ^fnudj*		
	2½ thou dh fdrkc & fuca/k& vuar xksiky 'ksoMs		
	3½ lk;kZoj.k& iznw"k.k % leL;k eukstxr dh & fuca/k&		
	foosdh jk;		
	4½ xkSjk & laLej.k & egknsoh oekZ		
	5½ izfr'kks/k & ,dakdh & MkW- jkedqekj	35	
(Unit-3)	oekZ		
	i foHkkx%& ikB~;iqLrd%& ^^lkfgR;		
	ohfFkdk&Hkkx&2**		
	1½ fou; if=dk & rqylhnkl		
bdkbZ 4			
(unit-4)	3½ jghe ds nksgs & jghe	10	
	4½ fiz; izokl & v;ks/;kflag mik/;k; ^gfjvkS/k*		
	5½ ckny dks f?kjrs ns[kk gS & ukxktqZu		
	vU; ikB~; lkexzh %&		
	1½ thou o`Rr (Bio-Data)ifjHkk"kk] lkekU; ifjp;]		
	izk:i]fo'ks"krk,¡] izdkjA		



2½ lk{kkRdkj	(Interview)ifjHkk"kk]lhek,¡] mÌs';] fl)kar]
izdkj]egRRoA	

fVIi.kh%& bdkbZ& 4 dh lkexzh v/;;u vkSj v/;kiu ds ek/;e ls rS;kj dh tk;sA



3T6.3-fo"k;%& fgUnh r`rh; l= % Semester III fo"k;%& fgUnh

le;%& rhu ?kaVs

dqy vad%&80

iz'u&1Toyar leL;kvksa] vk/kqfud Kku&foKku rFkk izlkj ek/;e vkfn fo"k;ksa ij vk/kkfjr fuca/kA

1/4 fdUgh pkj esa ls ,d fo"k; ij & 'kCn e;kZnk 400 'kCnksa rd1/2 vad&16

iz'u&2x|& foHkkx ij vk/kkfjr ikBksa esa ls fodYi ds lkFk nh?kksZRrjh iz'uA vad&16

1/4nks iz'uksa esa ls ,diz'u dk mRrj visf{kr gSA1/2

iz'u&3i|& foHkkx ij vk/kkfjr dforkvksa esa ls fodYi ds lkFk nh?kksZRrjh iz'uA vad&16

1/4nks iz'uksa esa ls ,diz'u dk mRrj visf{kr gSA1/2

iz'u&4rhu x|&foHkkx lss o rhu i|& foHkkx ij vk/kkfjr dqy Ng y?kq iz'uksa esa ls fdUgha pkj iz'uksa ds mRrj visf{kr gSSA 4 x4vad =vad&16

iz'u&5 blds vUrxZr IEiw.kZ ikB~;Øe Is pkj y?kqRrjh iz'u gksaxsaA izFke iz'u x| Is] f}rh; iz'u i| Is] r`rh; iz'u eqgkojs vkSj yksdksfDr;ksa Is vkSj prqFkZ iz'u i=&ys[ku Is iwNs tk;saxsa A IHkh iz'uksa ds mRrj visf{kr gSA 4 x4vad =vad&16

vkUrfjd ewY;kdau & 20 vad dqy vad foHkktu%&

fucU/k&16 vad
x| foHkkx & 28 vad
i| foHkkx &28 vad
vU; ikB~; lkexzh& 08 vad
dqy vad &80 vad



Vocational Course

`Semester III

(Same syllabus for all vocational group subjects in B.Com - I) 3T7-Entrepreneurial Development-I

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

.....

Level of knowledge: Basic knowledge

Objective: To provide knowledge regarding assisting institutions and preparation of project.

Unit-I

Institutions Assisting Entrepreneurs- District Industries Centres (DICs), State Small Industries Corporations (SSIC), Small Industries Services Institute (SISI), Small Industry Development Corporations (SIDCO), Khadi & village Industries Commission (KVIC)

Unit-II

Commercial Bank & Entrepreneurial Development: State Bank of India (SBI), Punjab National Bank (PNB), Indian Bank (IB), Bank of Baroda, Bank of India (BOI), Canara Bank, Syndicate Bank, Export Import Bank of India (Exim Bank).

Unit-III

Concept of project and classification of project, project identification, project selection, elements of project formulation - project report, contents of project report- project design - project appraisal

Unit-IV

Methods of project appraisal-- Ratio analysis - Break even analysis - Profitability analysis, average rate of return, overrun analysis,

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande : Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.
- ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.



Group – I : Computer Applications

3T8.1: Application Software

Time: 3 Hours Theory: 80

Marks

Practical: 20 Marks

Unit-I: Introduction to PowerPoint

Working with PowerPoint Window, Standard Toolbar, Formatting Toolbar, Drawing Toolbar, Moving the Frame, Inserting Clip Art, Picture, Slide; Text Styling, Send to Back, Entering Data to Graph,

Unit-II: Features of PowerPoint

Organization Chart, Table, Design Template, Master Slide, Animation Setting, Saving and Presentation, Auto Content Wizard, Package for CD (Pack & Go Feature).

Unit-III: Introduction to MS-Access

Introduction to database management system, DBMS vs RDBMS, Database Administrator (DBA) and its role.

Introduction to Microsoft Access, creating a database in access, using database wizards and blank database, creating table, database view and design view,

Unit-IV: Introduction to MS-Access

Creating queries, forms, reports and macros in MS-Access, Relationship in MS-Access

Practical: Practical will be based on MS-PowerPoint and MS-Access

Books Recommended:

- 1. Microsoft Office –2000 Gini Courter, Annelte Marquis BPB
- 2. IT Today (**Encyclopedia**) S.Jaiswal
- 3. A First Course In Computers Sanjay Saxena
- 4. First Text Book On Information Technology Srikant Patnaik
- 5. Guide To Microsoft Access Carl Townsand
- 6. An Introduction To Database Management System Bipin C. Desai (Galgotia Pub.)



7. Database Management Design – CSV Murthy (Himalaya)

(Semester - III) Group - II : Principles & Practice of Insurance 3T8.2:General Insurance - Paper I

Time: 3 Hours] Theory: 80 Marks

Internal Assessment: 20 Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about General Insurance.

Unit - I

- General Insurance : Meaning Definition ,Functions, Importance of General Insurance
- Principle of General Insurance ,History and Development of Insurance

Unit - II

- Types of Insurance, Life Insurance Vs.General Insurance
- Silent features of General Insurance Business (Nationalisation) Act,1972
- Concept of Reinsurance ,Double Insurance and Over insurance and its features **Unit-III**
- Fire Insurance : Meaning, features and policy conditions for Fire Insurance, premium calculation, fire insurance contracts.
- Procedure of Taking of Fire Policy, Types of Fire insurance, Settlement of Claim of Fire Insurance, rate of fixation in fire insurance
- **Unit IV** Introduction to miscellaneous insurance, nature and utility of miscellaneous insurance, progress of miscellaneous insurance, general insurance business in India.
 - Introduction to National Agricultural Insurance Scheme, property, motor vehicle, health, cattle and engineering insurance, public liability insurance

Recommended books:

Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.
Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication



Principles of Insurance, Dr. Shakti Pratchbal and Dr. N.P. Dwivedi, Himalaya Publishing House

✓ बीमा के सिध्दांत एवं व्यवहार — भगवती प्रकाळ अर्मा, राजीव जैन, पुरुशोलाम दयाल— हिमालया पळिलिळांग हाऊस

Group-III

3T8.3- Advertising, Sales Promotion and Sales Management - III

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

• Level of knowledge: basic knowledge

• Objectives: to acquaint students with the theory and practice of advertising as well also management of a firm's sales operation.

CONTENTS

Unit-I

- **Introduction:** meaning of advertising, importance of advertising from the viewpoint of marketing and communication, role of advertising in the marketing mix – interrelationship with product decisions, Pricing Decision, Channels Decision. Personal Selling, Sales Promotion and Publicity.

Unit-II

- **Scope of advertising:** How advertising works (a few case studies), Stimulating, Expanding and sustain scale: secure sales lead, Increasing profits, Demarketing, Supporting other promotion tools etc.

Unit - III

Various forms of advertising: National, Retail, Trade, Cooperative, Industrial, Corporate/Institutional, Financial, Public Service, Political, Primary and Selective demand Ad; Push and Pull Ad.

Unit - IV

- Advertising objectives: Meaning and importanc4e, Difference between objective, goals and strategy, possible Ad objectives, Sales as an objective, communication objectives, DAGMAR Approach of RH Colley.

Recommended books:

- ✓ Luick, John F and Siegler, William Lee, Sales promotion and Modern Merchandising (McGraw Hill Book Co., New York, 1968)
- ✓ Still, Richard, Edward W & Govoni Norman AP, Sales management Decisions, Strategies and cases (Prentice Hall India Pvt. Ltd., New Delhi, 1981)
- ✓ Stanton, William J & Buskrit, management of Sales Force (Richard D, Irwin, Inc. Homewood, 1987)
- ✓ Russell, Frederic A. Beach, Frank H & Buskrit, Richard H, Selling principles and Practices (Mcgraw Hill, International Book Co.1982)
- ✓ David Aaker, Advertising management (Prentice Hall India Pvt. Ltd., New Delhi)



✓ Rajiv BAtra, Myers, David Aaker, Advertising Management (Prentice Hall India Pvt. Ltd., New Delhi)

SEMESTER III QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development &ASM

TIME:	- 3 Hours]		[Full Marks:- 80
		N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.	
Q.1.(a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.2. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
(0)		OR	O WILLING
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
O(2/(c))	LINUT I		8 Marks
Q.3. (a)	UNIT – I		
(b)	UNIT – I	OR	8 Marks
(c)	UNIT – I	OK	8 Marks
(d)	UNIT – I		8 Marks
(u)	OMII – I		o warks
Q.4. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.5. Answer	in Brief		
(a)	UNIT – I		4 Marks
(b)	UNIT – II		4 Marks
(c)	UNIT – III		4 Marks
(d)	UNIT – IV		4 Marks



B.Com. – Second Year Semester-IV

4T1-: Financial Accounting – III

Unit - I

Final Accounts of Banking Companies

Meaning of Banking Companies, Functions of Banking, Restrictions for a Banking Company, Provision of the Banking Companies Regulation Act 1949, Preparation of Annual accounts as per Banking Companies Regulation Act 1949 as per amendment by RBI. (Theory & Numericals)

Unit – II

Final Accounts of General Insurance Companies

Introduction, Types of General Insurance, Important Terms- Reserve for unexpired Risk, Reinsurance Claims, Reinsurance Premium, Commission, Bonus in Reduction of Premium and preparation of final accounts

(Theory & Numericals)

Unit – III

Valuation of Goodwill

Meaning, Characteristics of Goodwill, Factors influencing the value of goodwill, Need for Valuation of goodwill, Valuation of goodwill as per -Average Profit Method, Weighted Average Profit Method, Super Profit Method, Capitalization Method. (**Theory & Numericals**)

Unit - IV

Liquidation of Company.

Meaning, Types of Liquidation, Steps in Voluntary Liquidation, Functions of Liquidator, Liquidators remuneration/Commission. Preparation of Liquidator's Final Statement of Account only. (Theory & Numericals)

The Financial year ends on 31st March.

Books Recommended

Gupta R. L. – Advanced Financial Accounting – S. Chand & Sons

Kumar, Anil S. - Advanced Financial Accounting - Himalaya PublicationHouse

Shukla and Grewal: Advanced Accounts (S. Chand & Ltd. New Delhi)

Jain and Narang: Advanced Accounts (Kalyani Publishers, Ludhiana)

Sr. K. Paul: Accountancy, Volume –I and II (New Central Book Agency, Kolkata)

R. K..Lele and Jawaharlal: Accounting Theory (Himalaya Publishers)

Dr. L. S. Porwal: Accounting Theory (Tata McGraw Hill)



Robert Anthony, D. F. Hawkins & K. A. Merchant : Accounting Text & Cases(Tata McGraaw Hill)

Dr. S. N. Maheshwari : Corporate Accounting (Viakas Publishing House Pvt.Lit. New Heldi) Dr. Ashok Sehgal& Dr. Deepak Sehgal : Advanced Accounting (Taxmann,New Delhi)

Question Paper Pattern Semester IV 4T1-Financial Accounting – III Paper - I

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours		Marks-80
Q. No. 1 – Unit I		
_	a) Theory	08 Marks
	b) Problem	08 Marks
	OH	
	c) Problem	16Marks
Q. No. 2 – Unit II	a) Theory	08 Marks
	b) Problem	08 Marks
	O) I Toblem OF	
	c) Problem	16 Marks
	,	
Q. No. 3 – Unit III		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OF	
	c) Problem	16 Marks
O No 4 Hait I		
Q. No. 4 – Unit I	a) Theory	08 Marks
	b) Problem	08 Marks
	OF	
	c) Problem	16 Marks
	,	
0 N 7	\ TT '. T	D 11 04M 1
Q. No. 5	a) Unit- I	Problem 04 Marks



b)	Unit –II	Problem 04 Marks
c)	Unit-III	Problem 04Marks
d)	Unit-IV	Problem 04 Marks

4T2-: Skill Development

Unit I: Introduction:

Basic of personality, Human growth and behavior, Motivation and morality, Meaning of Skill, types; soft and hard skill, need for developing skill, human skill and behavior, Motivation and morality, skill development and employment

Unit II: Communication skills and Personality Development:

Intra-personal communication and Body Language, Inter-personal Communication and Relationships, Leadership Skills, Team Building and public speaking, Communication in English, Presentation Skills, and Quality required for good public speaker,

Unit III: Techniques in Personality development

Self confidence, Mnemonics, Goal setting, Time Management and effective planning, Stress Management, Meditation and concentration techniques, Self Motivation Self acceptance and Self growth

Unit IV: Entrepreneurial skill development

Skill development of rural industrial sectors - small scale - handloom - agro based industries, rural artisans - handicrafts and sericulture. Meaning of entrepreneurship, types skill required for entrepreneurship

Suggested Books:

- 1. Personality Development –Transform yourself by Rajiv K Mishra.
- 2. Personality Development and Communication Skills II by Dr.C.B.Gupta
- 3. Business Communication and Personality Development: Lessons for Paradigm Change in Personality by Biswajit Das and Ipseeta Satpathy.
- 4. Entrepreneurship development.



Question Paper Pattern Semester-IV

4T2-Skill Development

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours			Marks-80	
Q.1.				
Q.1.	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II	9-	08 Marks
		1 D 1475 - 11	OR	101.1
	(c)	UNIT – II		16Marks
Q.3.				
Q.J.	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
	(-)		OR	
	(c)	UNIT – III		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT – IV		16Marks
0.5				
Q.5.	a)	UNIT – I		04 Marks
	a) b)	UNIT – II		04 Marks
	c)	UNIT – III		04 Marks
	d)	UNIT – IV		04 Marks



4T3-: Income Tax

Unit I: Introduction of Income Tax

i) Basic Concepts of Income Tax, Meaning & Definition of Assesses, Assessment Year, Previous Year, Gross Total Income, Types of Assesses, Income Exempt from tax, Capital & Revenue Expenditure. Agricultural Income.

Residential Status

ii) Residential Status and its effects on Tax incidence: Residential status of Individual, HUF, Firm & Association of Person, Company, Basic Conditions & Additional Conditions. (Theory)

Unit II: Income from Salary

- i) Definition of Salary, Allowances, Types of Allowances, Taxable Allowances,
- Tax Free Allowances, Partly Taxable Allowances,
- ii) Perquisites, Types of Perquisites, Taxable Perquisites, Tax Free Perquisites,
- iii) Types of Provident Fund, Tax treatment of P.F, E.P.F., Superannuation Fund and Computation of Salary Income/Taxable Salary and tax liability. (**Theory & Numericals**)

Unit II Income from House Property

- i)Meaning of Annual Value, Fully exempted income of house property, deemed owner. ii)Deduction from income from house property, unreleased rent, computation of income from house property. (**Theory & Numericals**)
- Unit IV: i)Income Tax Slab Rates, Rebates, Income which do not form part of total Income ii)Deduction under section 80C, 80CCC, 80CCD, 80D, 80DDB, 80E, 80G, 80GG, 80U

iii) Income from Other Sources

Income specifically included under the head of other sources, specified income, casual income, deduction allowed from the income of other sources, computation of income from other sources. (**Theory & Numericals**)

Books Recommended:

Ahuja G. K. and Ravi Gupta :- Systematic Approach to Income and Central Sales tax, Bharat law house, New Delhi.

• Singhania V. K.: - Direct taxes: - Law and Practice, Taxman's publication, Delhi.



- Jain K. C., Gour V. P., Narang D. B.: Direct taxes Kalyani Publishers, Delhi.
- Datey V. S. :- Indirect taxes law and Practice, Taxman, New Delhi, customs and excise Law Time various issues.
- Dr. V. Upgade and Shende Dr. A. K. Income Tax, Anuradha publication, Nagpur.

Question Paper Pattern Semester-IV

4T3-Income Tax

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours		Marks-80
Q. No. 1 – Unit I		
	a) Theory	08 Marks
	b) Theory	08 Marks
	OR	
	c) Theory	08 Marks
	d) Theory	08 Marks
Q. No. 2 – Unit II	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 3 – Unit III	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 4 – Unit I	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 5	a) Unit- I	Problem 04 Marks
	b) Unit –II	Problem 04 Marks
	c) Unit-III	Problem 04Marks
	d) Unit-IV	Problem 04 Marks



4T4-: MONETARY ECONOMICS-II

Unit I: Commercial Banking

Evolution, Meaning, Functions of Commercial Banks. Role commercial banks in a developing economy. Process of Credit Creation by Commercial Banks & its Limitations, Investment Policy of Commercial Banks. Non-Performing Assets- Meaning, Criteria and Causes.

Unit II: E-Banking & Core Banking

Meaning, Features, Advantages & Disadvantages of ATM (Automated Teller Machines.) Meaning, Features, Merits and Demerits of Credit cards, Plastic cards, Smart cards, e-purse, Laser cards. EFT (Electron Fund Transfer), ECS (Electronics clearing system).

Unit III: Banks and Customers Relationship and Services

Introduction, Meaning of Customer. Bank & Customer Relationship- Debtor & creditor, Trustee and Beneficiary, Agent and Principal, Bailer and Bailee. Opening, operating and closing of various bank accounts. Demat Account -Advantages, Opening and Operation of Demat Account. Methods of Calculating Interest Rates on deposits and on loans.

Unit: IV Central Bank

Meaning, Objectives, Functions, Role of Central Bank. Credit Control- Meaning, Objectives, Methods: Quantitative- Bank Rate, Open Market Operations, Cash Reserve Ratio(CRR), Statutory Liquidity Ratio(SLR), Repo Rate. Qualitative – Varying margin requirement, Regulation of consumer's credit, Issuing directives, Publicity measure, Moral suasion, Credit rationing and limitations.

Books Recommended:

- 1. Monetary Economics, RR Paul, Kalyani Publishers.
- 2. Money, Banking and International Trade, K.P.M. Sundaram, Sultan Chand, New Delhi.
- 3. Macroeconomics, Mankiw, N. Gregory, Macmillan Worth Publishers New York, Hampshire U.K.



- 4. Financial Institutions and Markets , Agrawal & Gupta, Kalyani Publishers.
- 5. Modern Banking ,Vaish, M.C, Oxford & IBH Publishing Co.,New Delhi
- 6. Money and Financial System P.K. Deshmukh, Phadke Prakashan.
- 7. Monetary Economics, Rashi Arora, Sheth Publishers, Mumbai

Question Paper Pattern Semester-IV

4T4-Monetary Economics- II

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

:- 3 ł	nours		Marks-80
(a)	UNIT – I		08 Marks
(b)	UNIT – I		08 Marks
		OR	
(c)	UNIT – I		16Marks
(a)	LINIT II		08 Marks
			08 Marks
(0)	OMI – II	OR	00 Warks
(c)	UNIT – II		16Marks
(a)	UNIT – III		08 Marks
(b)	UNIT – III		08 Marks
		OR	
(c)	UNIT – III		16Marks
(-)	LINIUT IXI		08 Marks
			08 Marks
(0)	UNII – IV	OR	Oo Marks
(c)	UNIT - IV	OK .	16Marks
a)	UNIT – I		04 Marks
b)	UNIT – II		04 Marks
c)	UNIT – III		04Marks
d)	UNIT – IV		04 Marks
	(a) (b) (c) (a) (b) (c) (a) (b) (c) (a) (b) (c) (c)	(b) UNIT - I (c) UNIT - I (a) UNIT - II (b) UNIT - II (c) UNIT - II (a) UNIT - III (b) UNIT - III (c) UNIT - III (d) UNIT - III (e) UNIT - IV (b) UNIT - IV (c) UNIT - IV (d) UNIT - IV (e) UNIT - IV	(a) UNIT - I (b) UNIT - I (c) UNIT - I (a) UNIT - II (b) UNIT - II (c) UNIT - II (a) UNIT - III (b) UNIT - III (c) UNIT - IV (d) UNIT - IV OR OR OR OR OR OR OR OR OR O



Allocation of marks for the subjects-

- 1. Financial Accounting -III
- 2. Skill Development
- 3. Income Tax and
- 4. Monetary Economics-II

1a	Two perio	Two periodical class tests				
1b	An assign	An assignment/Viva/Group Discussion/Seminar based on curriculum to				
	be assesse	d by the teacher concerned				
1		Internal assessment Total marks				
2	Unit- I	20 marks				
	Unit-II					
	Unit-III					
	Unit-IV					
		Semester wise End Examination marks				
			80 marks			
		Total marks per subject	100 marks			



Semester-IV

4T5-Compulsory English

Unit -I PROSE ITEMS FROM "BLOSSOMS"

PROSE ITEMS FROM "BLOSSOMS":

1. Go! Kiss the World - Subroto Bagchi

2. *The Gold Frame* - R.K.Laxman

3. *The Cabuliwallah* - Rabindranath Tagore

4. *The Struggle for an Education* - Booker T. Washington

Unit -II POEMS FROM "BLOSSOMS"

POEMS FROM "BLOSSOMS":

1. If – Rudyard Kipling

2. Stay Calm - Grenville Kleiser

3. Ballad of the Landlord - Langston Hughes

Unit –III

- (A)Comprehension of Unseen Passage
- (B) Transformation of Sentences:
 - a. Exclamatory-Assertive and vice-versa
 - **b.** Change the Voice

Unit -IV

(A) Business Correspondence:

Credit and Collection Letters – Granting Credit/Refusing Credit, Reminders for payment

(B)Interoffice Memorandum/Office Order

Prescribed Text : Blossoms (Raghav Publishers)

Reference Books (For Sem III & IV):



For Unit III – Learner's English Grammar and Composition – N.D.V.Prasada Rao (S.Chand)

For Unit IV – 1. Business Correspondence and Report Writing – R.C.Sharma & Krishna Mohan (Tata

2.Developing Communication Skills – Krishna Mohan & Meera Banerji (Macmillan) (Tata McGraw-Hill)

4T5-Compulsory English

Question Paper Pattern

Q 1. A. One LAQ out of Two based on Prose items (Unit I: Lesson No. 1 & 2)	08 Marks
B. One LAQ out of Two based on Prose items (Unit I: Lesson No 3 & 4)	08 Marks
Q 2. Four SAQs with internal choice based on prescribed Prose items (Unit I) (4 x 4 Marks)	16 Marks
Q 3. A. One LAQ out of Two from prescribed poems (Unit II)	08 Marks
B. Comprehension of Unseen Passage – 4 VSAQs –4 x 2 Marks Q 4. A. (i) Four items based on Unit III B (a) – 4 x 1 Mark -	08 Marks 04 Marks
(ii) Four items based on Unit III B (b) – 4 x 1 Mark -	04 Marks
B. One out of Two Questions based on Business Correspondence [Unit IV (A)]	08 Marks
Q 5. A. One out of Two Questions based on UNIT IV (B)	08 Marks
B. Four VSAQs based on Unit I and Unit III - (4×2 Marks)	08 Marks
Total = 8	0 Marks

N.B. LAQ - Long Answer Question to be answered in about 150 words.

SAQ - Short Answer Question to be answered in about 75 words.

VSAQ – Very Short Answer Questions to be answered in one or two sentences.

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.



Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments -6+6 = 12 Marks

Performance & Conduct – 4 Marks

Attendance - 4 Marks

TOTAL - 20 MARKS

4T6.1-Supplementary English

Semester - IV

Unit 1 - Prose

- 1. The Last Salvation- R.P. Sisodia
- 2. The Romance of a Busy Broker- O' Henry
- 3. Playing the English Gentleman- M.K. Gandhi
- 4. My Financial Career- Stephen Leacock

Unit 2 - Poetry

- 1. Dulce et Decorum est- Wilfred Owen
- 2. At the Lahore Karhai- Imtiaz Dharker
- 3. Leisure- W.H. Davies

Non-Textual Portion-

Unit 3 - Writing Skills

A) Report Writing

- Recommendation Report
- Situational Report about an event or function
 - **B**) Writing a dialogue with minimum 5 exchanges

Unit 4 - Vocabulary

(A) Business Terminology

(Advice Note, Arbitration, Boom, Brand, Buffer, Curriculum Vitae, Capital, Devaluation, Duty, Entrepreneur, Gilt-Edged Stock, Infrastructure, Internal Audit, Ledger, Petty Cash, Raw Data, Scrip, Social Audit, Stock Exchange, Tender, Trademark, Underwrite, Warranty, Wildcat Strike, Write-Off) (Students to give the appropriate business term for the definition/explanation given)

Prescribed Text:

Reflections - A Supplementary English Coursebook for Undergraduates (Raghav Publishers) (For Unit I & II)

Reference Books-



- 1. Professional Communication Roshan Lal Raina, Iftikhar Alam, Faizia Siddiqui (Himalaya Publishing House) (For the topic 'Report Writing' under Unit III)
- 2. English for Practical Purposes Z.N. Patil, B.S. Valke, Ashok Thorat, Zeenat Merchant. (Macmillan) (for the topic 'Dialogue Writing' under Unit III)
- 3. Business Correspondence & Report Writing A Practical Approach to Business & Technical Communication- R.C. Sharma & Krishna Mohan. (McGraw Hill Higher Education) (for the topic 'Business Terms' under Unit IV)

4T6.1-Supplementary English Question Paper Pattern

Semester - IV

Q1.

(G) Unit 1 Prose - LAQ 150 words (2 out of 4) $2 \times 08 = 16$ marks

Q 2.

(H) Unit 1 Prose - SAQ 75 words (4 out of 5)

 $4 \times 04 = 16 \text{ marks}$

Q 3.

(E) Unit 2 Poetry- LAQ 175 words- 1 out of 2 $1 \times 08 = 08$ marks

(F) Unit 2 Poetry - SAQ 75 words - 2 out of 3 $2 \times 04 = 08$ marks

Q 4.

(A) Unit 3- Report Writing (1 out of 2) $1 \times 08 = 08$ Marks

(B) Unit 3- Writing a dialogue 1 x 08=08 Marks (with minimum4 exchanges)

Q 5. (A) Business Terms (4 out of 6) 4x02 Marks = 08 Marks

(B) VSAQ from Unit 1 and Unit 2 4X02Marks =08 Marks

Total Marks of Theory Examination-80

INTERNAL ASSESSMENT: 20 MARKS

The Internal Assessment would be done on the basis of the assignments submitted by the student and his/her performance, attendance and conduct during the Semester. The concerned teacher shall provide, in advance, a list of topics/assessment items/Question Bank (to the students) based on the Units prescribed for the Theory Examination. Students shall finalize 2 topics/items from 2 different units with the approval of the concerned teacher and submit the same within the prescribed deadline.



Students may be given freedom to submit a creative writing assignment on human values/world peace/environmental issues inspired by or related to the lessons/poems prescribed in the syllabus.

2 Assignments – 6+6 = 12 Marks Performance & Conduct – 4 Marks Attendance - 4 Marks TOTAL – 20 MARKS

Theory Examination – 80 Marks Internal Assessment – 20 Marks Total: 100 Marks

> **4T6.2**-विषय : मराठी सत्र चौथे

प्रश्न क्र.	घटक क्र.	अभ्यासक्रम	गुण	शेरा
8	8	साहित्यविषयक निबंध (चार पैकी एक;	२०	
		शब्द मर्यादा- ४००)		
२	२	गद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन	39	
		भाग दोन		
		१ इंद्रायणीच्या वाळवंटात (
		श्री. म . माटे)		
		२ मित्र (ना. सी. फडके)		
		३ माणसांत विरलेला माणूस (
		दुर्गा भागवत)		
		४ रामा मैलकुली (व्यंकटेश		
		माडगुळकर)		
		५ प्रेम (मारोती		
		चित्तमपल्ली)		
		६ विज्ञान युगात भारत (
		जयंत नारळीकर)		
3	3	पद्य विभाग : पाठ्य पुस्तक : भाषा दर्शन	34	
		भाग दोन		
		१ दोन भारुडे (संत एकनाथ)		
		२ विद्यार्थ्याप्रत (केशवसुत)		
		३ आई (यशवंत)		



		४ विचार झाला पाहिजे (वसंत आबाजी डहाके) ७ आता आम्ही (वैभव सोनारकर)		
8	8	व्यावहारिक मराठी १ स्मरणिका संपादन	१०	
		२. वाक्प्रचार		

4T6.2-विषय : मराठी

प्रश्न पत्रिकेचे स्वरूप

सत्र : चौथे

वेळ:३ तास) (एकूण गुण-80

प्रश्न:१ साहित्य विषयक निबंध (चार पर्यायांपैकी एका विषयावर)

शब्दमर्यादा- ४०० शब्द

(16 गुण)

प्रश्नः २ गद्य विभागावर आधारित दीर्घोत्तरी दोन प्रश्नांपैकी एक सोडवा (16 गुण)

प्रश्न: ३ पद्य विभागावर आधारित दीर्घीत्तरी दोन प्रश्नांपैकी एक सोडवा (16 गुण)

प्रश्नः ४ दोन गद्य विभागावर व दोन पद्य विभागावर आधारित चार लघु प्रश्नांच्या दोन गटांपैकी एक

गट सोडवा (16 गुण)

प्रश्न: ५ एक लघु प्रश्न गद्य विभागवर, एक लघु प्रश्न पद्य विभागावर आणि दोन लघु प्रश्न व्यावहारिक मराठीवर आधारित अशा चार लघु प्रश्नांची उत्तरे लिहा (16 गुण)

एकूण गुण विभागणी

- १. गद्य विभाग 28 गुण
- २. पद्य विभाग 28 गुण



- ३. व्यव्हारिक मराठी 08 गुण
- ४. निबंध 16 ग्ण

एकूण गुण : 80

अंतर्गत मूल्यांकन गुण २०: संबंधित महाविद्यालयातील प्राध्यापकांनी परीक्षार्थ्याची वर्गातील उपस्थिती (०५ गुण), परीक्षार्थ्याचा वर्गातील सक्रीय सहभाग (०५ गुण) आणि लिखित स्वरूपातील गृह पाठ (१० गुण) या निकषांवर एकूण २० गुणांपैकी विद्यार्थ्यांचे अंतर्गत मूल्यांकन करणे.

> सत्र लेखी परीक्षा : ८० गुण अंतर्गत मूल्यांकन : २० गुण एकूण गुण : १००

4T6.3-fo"k;%& fgUnh prqFkZ l= %Semester IV

le;%& rhu ?kaVs

dqy vad%&80

bdkbZ	bdkb;ksa (Units) dk ikB~;Øe Øekuqlkj	Vad
Øekad(Units)		
bdkbZ 1	lkfgfR;d fo"k;ksa] Hkkjrh; R;kSgkjksarFkk	20
(Unit-1)	LokLF; laca/kh fo"k;ksa ij vk/kkfjr fuca/kA	İ
	1/4 fdUgh pkj esa ls,d fo"k; ij & 'kCn lhek 400 rd1/2	İ
bdkbZ 2		İ
(Unit-2)	Xk foHkkx%& ikB~;iqLrd%& ^^lkfgR; ohfFkdk	ı
	&Hkkx&2**	35
	1½ y{eh dk Lokxr&,dakdh &misUnzukFk ^v'd*	
	2½ vHkko&dgkuh&fo".kg izHkkdj	1
	3½ vdsyh&dgkuh&eUuw HkaMkjh	İ
	4½ ?kj dh ryk'k&dgkuh&jktsUnz ;kno	İ
bdkbZ 3	5½ ydh &dgkuh&eerk dkfy;k	ı
(Unit-3)		i
	i foHkkx%& ikB~;iqLrd%& ^^lkfgR; ohfFkdk	35
	Hkkx&2**	İ
	41/ when 9 Oilealle 91 Health himles for 1	İ
	1½ xhr &Qjks'k&Hkokuhizlkn feJ	1
	2½ Lof.kZe ijkx&lqfe=kuUnu iar	1
hdkh7 4	3½ /kjrh LoxZ leku&xksikynkl ^uhjt*	ļ 1
bdkbZ 4	4½ [kksus dks ikus vk;s gks\&ek[kuyky prqosZnh	



(unit-4)	5½ >k¡lh dh jkuh dh lekf/k ij&lqHknzkdqekjh	
	pkSgku	
		10
	vU; ikB~; lkexzh%&	
	1½ izfrosnu ys[ku ¼Report Writing½& vFkZ,oa	
	ifjHkk"kk] mn~Hko vkSj fodkl] fo'ks"krk,¡] izdkj ,oa	
	rRo] izfrosnu rS;kj djrs le; /;ku nsus ;ksX; ckrsaA	
	2½ lekpkj ys[ku ¼News Writing½& lekpkj&i= ds	
	fy, lekpkj ys[ku] izeq[k vk;ke ,oa izk:lk rS;kjdjuk]	
	foKku&fopkj] laln lekpkj] lekpkj vkSj laln] vijk/k	
	lekpkj] [ksy lekpkj] jkstxkkj lekpkj] lkekf;d ,oa O;fDrxr	
	lekpkj] 'kqHk voljksads lekpkj] e`R;q lekpkj] foKkiu	
	lekpkj vkfnA	
	Lkekpkj ys[ku esa vko';d ckrksa ij /;ku nsuk	
	&'kh"kZiafDr(Head line)] lekpkj ys[ku izfØ;k] vPNs	
	lekpkj dhfo'ks"krk,¡] Hkk"kk&'kSyh] vPNs laoknnkrk	
	dh ;ksX;rk,¡A	
	5/11.1.0/0 11.70 / 11.11	
	fVli.kh%& bdkbZ& 4 dh lkexzh v/;;u vkSj v/;kiu ds	
	ek/;e ls rS;kj dh tk;sA	

iz'u&i= dk izk:lk ,oa vad foHkktu prqFkZl= 4T6.3-fo"k;%& fgUnh

le;%& rhu ?kaVs

dqy vad%&80

iz'u&1 lkfgfR;d fo"k;ksa] Hkkjrh; R;kSgkjksa rFkk LokLF; laca/kh fo"k;ksa ij vk/kkfjr fuca/kAvad&16

1/4 fdUgha pkj esa ls ,d fo"k; ij & 'kCn e;kZnk 400 rd1/2

iz'u&2 x|& foHkkx ij vk/kkfjr ikBksa esa ls fodYi ds lkFk nh?kksZRrjh iz'uA vad&16

1/4nks iz'uksa esa ls ,d iz'u dk mRrj visf{kr gSA1/2

iz'u&3 i|& foHkkx ij vk/kkfjr dforkvksa esa ls fodYi ds lkFk nh?kksZRrjh iz'uA**vad&16**



1/4nks iz'uksa esa ls ,d iz'u dk mRrj visf{kr gSA1/2

iz'u&4rhu x|&foHkkx lss o rhu i|& foHkkx ij vk/kkfjr dqy Ng y?kq iz'uksa esa ls fdUgha pkj iz'uksa ds mRrj visf{kr gSSA 4 x4vad=vad&16

iz'u&5 blds vUrxZr IEiw.kZ ikB~;Øe ls pkj y?kqRrjh iz'u gksaxsaA izFke iz'u x| ls] f}rh; iz'u i| ls] r`rh; iz'u lkzfrosnu ys[kuls vkSj prqFkZ iz'u lekpkj&ys[ku ls iwNs tk;saxsa A lHkh iz'uksa ds mRrj visf{kr gSA 4 x 4vad=vad&16

vkUrfjd ewY;kdau & 20 vad dqy vad foHkktu%&

fucU/k&16 vad
x| foHkkx & 28 vad
i| foHkkx &28 vad
vU; ikB~; lkexzh& 08 vad
dqy vad &80 vad

Vocational Course
Semester IV
(Same syllabus for all vocational group subjects in B.Com – I)
4T7-- Entrepreneurial Development-I

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Level of knowledge: Basic knowledge

Objective: To provide knowledge about small business and environment consideration.

Unit-I

Small Enterprises

Definition, Characteristics, Relationship between Small and Large Units, Objectives, Scope, Role of Small Enterprises in Economic Development.

Unit-II



Selection of Types of Organisation

Sole proprietorship, Partnership, Joint stock company, Factors influencing the choice of organization

Unit-III

Legal Aspects of Small Business – Major provisions of Income Tax, Sales Tax, Patent Rules, Excise Rules – Factory Act and Payment of Wages Act.

Unit-IV

Environmental considerations – Concept of ecology and environment – Factors contributing to Air, Water, Noise pollution – Air, Water and Noise pollution standards and control – regulatory bodies. Personal Protection Equipment (PPEs) for safety at work places.

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande: Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.
- ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.

Group – I : Computer Applications

4T8.1: Computerized Accounting (C/A)

Time : 3 Hours Theory : 80
Marks Practical : 20 Marks

Unit-I:

Introduction to Accounting, Advantages of accounting, Books of accounts, Classification of Accounts, Financial Statements, Inventory management, Computerized Accounting, Need of Computerized Accounting, Accounts Organization, Accounts group, Loans Liabilities, Assets and Budget.

Unit-II:



Accounting Software's Introduction to tally Software, Features of Tally Screen, Company information, Creating new Company, Gateway, Selection of Company, selection of Options, Buttons at Gateway, Working with multiple Companies, Company Features,

Configuration- General, Numeric Symbols, Voucher Entry, Creation of Voucher Screen, invoice Order Entry, Printing.

Unit-III:

Accounts info menu, Account Groups- create new group, creation of primary group. Normal and advance information, Ledger Accounts, cost categories, Cost Centers. Creation of Budget, Types of budget. Voucher- Voucher Entry, creation of Vouchers Screen, types of Voucher, Selection of Voucher types, Post Dated Voucher, printing of Vouchers, Cheque Printing.

Unit-IV:

Inventory info, Features of Inventory info. Configure- Inventory Info, balance Sheet, Audit Trail, Ratio Analysis. Display-Accounting Report Display, Inventory report Display, and MIS Report Display. Printing Reports, Export, Export of Data.

Practical: Practical will be based on Tally S/W

Tally Software – All Accounting Problems Viz. Balance sheet, Profit & Loss, Cash Book, Loans, Cost Accounting, Vouchers, Budget, Sales and Purchase, Assets & Liabilities, Inventory Management, Financial Statements, Books of accounts, Ledger, etc.

Books Recommended:

- 1. Accounting with Tally: K.K. Nadhani, BPB Publication
- 2. Tally Tutorial : K.K. Nadhani and A.K. Nadhani, BPB Publication.
- 3. Advances Accounts Vol-I: M.C. Shukla, T.S.Grewal and S.G,Gupta, S.Chand & Company, Delhi.
- 4. Accounting Principles: Anthony R.N. and J.S. Richard, Irwin Inc.
- 5. Advanced Accountancy By P.C. Tulsian, Tata McGraw HILL Publication.
- 6. Tally By S.B. Kishor (Dasganu)
- 7. Fundamentals of Computers ITL Education Solutions Ltd. (Pearson)



Group - II: Principles & Practice of Insurance 4T8.2- General Insurance - Paper II (Semester - IV)

Time: 3 Hours] Theory: 80 Marks

Internal Assessment: 20 Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about General Insurance.

Unit - I

- Nature of Marine Insurance, Marine insurance contract, Marine insurance policies, premium calculation, kinds of Marine insurance policies.



- Types of Marine losses, payment of claims, proximity clause, voyage warranties, progress of Marine insurance business in India.

Unit - II

- Policy conditions for Marine Insurance, Procedure of taking out Marine Policy
- Settlement of claim of Marine loss, Growth of Marine Insurance Business

Unit -III

- Nature of insurance benefits, insurers liability, resources to life and general table, value of benefits, basic plan of assurance.
- Temporary assurance and pure endowment.

Unit-IV

- Fidelity Guarantee Insurance, Public liability, Health Insurance, Personal Accident and Sickness Insurance
- Growth of Miscellaneous Insurance business in India
- Growth of General Insurance Business after Privatisation.

Recommended books:

Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.

Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House

Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication

Principles of Insurance, Dr. Shakti Pratchbal and Dr. N.P. Dwivedi, Himalaya Publishing House

🗸 बीमा के सिध्दांत एवं व्यवहार – भगवती प्रकाळा अर्मा, राजीव जैन, पुरूशोलाम दयाल- हिमालया प्रक्लिकिंग हाऊस

Group-III

4T8.3-Advertising, Sales Promotion and Sales Management – IV
Marks: 80 Time: 3 Hours

Full Marks: 80 Internal Assessment: 20

Unit-I

- **Advertising Budget:** Consideration to be kept in mind while deciding the budget, different methods. The budget-making process.

Unit-II

- **Media planning:** Importance of the exercise, Evaluation of important media-print, audiovisual, outdoor, direct mail, advertising on internet misc. media, the media planning process, important considerations- cost, coverage, flexibility, impact etc. computerized media selection, current Ad, Media scene in India.

Unit-III

- Role of selling in planed economy, selling as a career



- Acquiring skills and developing new qualities for salesmen and to improve growth chances.
- Tips and suggestions to improve personal ability, skills for salesmen, product knowledge, planned selling system.
- Practical suggestions to improve day to day field working, customer psychology, buying motives, trade relations, effective distribution network.
- Sales organizations- types, principles, aims and objectives.

Unit-IV

- Selection and training of sales force, latest techniques in training.
- Motivation and compensation plans
- Sales planning (forecasting) methods, budgets, implementation, review techniques.
- Communication, how to develop skills for effective communication, principles, objectives and methods.
- Sales mangers/supervisors their role, authority and responsibility

Recommended books:

- ✓ Luick, John F and Siegler, William Lee, Sales promotion and Modern Merchandising (McGraw Hill Book Co., New York, 1968)
- ✓ Still, Richard, Edward W & Govoni Norman AP, Sales management Decisions, Strategies and cases (Prentice Hall India Pvt. Ltd., New Delhi, 1981)
- ✓ Stanton, William J & Buskrit, management of Sales Force (Richard D, Irwin, Inc. Homewood, 1987)
- ✓ Russell, Frederic A. Beach, Frank H & Buskrit, Richard H, Selling principles and Practices (Mcgraw Hill, International Book Co.1982)
- ✓ David Aaker, Advertising management (Prentice Hall India Pvt. Ltd., New Delhi)
- ✓ Rajiv BAtra, Myers, David Aaker, Advertising Management (Prentice Hall India Pvt. Ltd., New Delhi)

SEMESTER IV QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development &ASM

TIME:-	3 Hours]		[Full Marks:- 80
		N.B 1) All questions are compulsory.	
		2) All questions carry equal marks.	
Q.1.(a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks



Q.2. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.3. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.4. (a)	UNIT – I		8 Marks
(b)	UNIT – I		8 Marks
		OR	
(c)	UNIT – I		8 Marks
(d)	UNIT – I		8 Marks
Q.5. Answer	in Brief		
(a)	UNIT – I		4 Marks
(b)	UNIT – II		4 Marks
(c)	UNIT – III		4 Marks
(d)	UNIT – IV		4 Marks
` /			

B.Com. – Third Year Semester-V 5T1- : Financial Accounting – IV

Unit - I

Amalgamation and Absorption of Companies

Introduction, Meaning, Characteristics, Objectives, Methods of purchase Consideration, Accounting Procedure of Amalgamation and Absorption.

(Theory & Numericals)

Unit - II

Reconstruction of Companies.

(Internal and External Reconstruction of Companies)

Meaning, Characteristics, Objectives, Difference between Reconstruction and Reorganization, Accounting Procedure of Reorganization and Reconstruction.

(Theory & Numericals)



Unit – III

Accounts of Public Utility Companies (Electricity, Gas and Water Supply

Companies) According to Double Accounting System-

Meaning, Main features of Double Accounting system, Objective of Double Accounting System, Difference between Double Accounting System and Single Accounting System, Merits, Demerits of Double Accounting System, Preparation of Final Accounts.

(Theory & Numericals)

Unit - IV

Valuation of Shares

Meaning, Need of Valuation of Shares, Factors affecting the value of shares, Methods of valuation of shares, Net Assets Method/Intrinsic Value Method, Yield Method. (**Theory & Numericals**)

The Financial year ends on 31st March.

Books Recommended

Question Paper Pattern Semester -V 5T1-Financial Accounting – IV

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time: - 3 hours Marks-80

Q. No. 1 – Unit I

a) Theory 08 Marks b) Problem 08 Marks OR c) Problem 16Marks



Q. No. 2 – Unit II			
	a) Theory		08 Marks
	b) Problem		08 Marks
		OR	
	c) Problem		16 Marks
Q. No. 3 – Unit III			
	a) Theory		08 Marks
	b) Problem		08 Marks
		OR	
	c) Problem		16 Marks
Q. No. 4 – Unit I			
	a) Theory		08 Marks
	b) Problem		08 Marks
		OR	
	c) Problem		16 Marks
Q. No. 5	a) Unit-	Ī	Problem 04 Marks
Ž. 1.3.0	b) Unit –		Problem 04 Marks
	c) Unit-I		Problem 04Marks
	d) Unit-l		Problem 04 Marks

5T2– :Cost Accounting

Unit - I

Cost Accounting:-

Meaning, Importance, Element of Cost, Cost-Absorption, Allocation of Overheads and Methods of costing, Difference between Cost Accounting and Financial Accounting. Simple Problems on Cost Sheet, Tender and Quotations. (**Theory & Numericals**)

Unit – II

Reconciliation of Profit /Loss shown by Cost and Financial Accounts:

Need for reconciliation of profit, reason for the difference between cost accounts and financial accounts, objectives of reconciliation statement, methods of preparation of reconciliation statement. (**Theory & Numericals**)

Unit – III



Process Cost Accounting:

Methods of costing, advantages and limitations of process costing, difference between job costing and process costing, Normal loss, Abnormal loss and Abnormal effectives, (Theory & Numericals)

Unit -IV

Contract Costing:

Features of contract costing, Types of contracts, Elements of contract cost, Nature of contract-completed contract, incomplete contract(**Theory & Numericals**)

- Books Recommended -

☐ S. N Maheshwari : Cost Accounting Theory and problems –Shri Mahavir Book Depot, New Delhi

- Sultan Chand and Sons New Delhi

T.S. – Grewal, M.P. Gupta – Cost Accounting – S. Chand, New Delhi
 Cost Accounting – S. Chand, New Delhi

ukla:- Cost Accounts (Hindi)

- Advanced Cost Accounting, S. Chand & Company
- Advanced Cost Accounting Kalyani Publication
 - Advanced Cost Accounting Himalaya Publication House

Question Paper Pattern Semester –V 5T2-Cost Accounting Compulsory Paper- II

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time: 3 hours Marks-80

Q. No. 1 – Unit I

a) Theory 08 Marks

20 (0.3) 2021

Off. Principal,
S.S. Maniar College, Nagpar

		b) Problem	OP	08 Marks
		c) Problem	OR	16Marks
Q. No. 2 – U	nit II			
		a) Theoryb) Problem	OR	08 Marks 08 Marks
		c) Problem	OK	16 Marks
Q. No. 3 – U	nit III			
		a) Theoryb) Problem	OR	08 Marks 08 Marks
		c) Problem	OK	16 Marks
Q. No. 4 – U	Jnit I			
		a) Theory		08 Marks
		b) Problem	0.5	08 Marks
		c) Problem	OR	16 Marks
Q. No. 5 -	Unit- I	a)	Problem 0	4 Marks
	Unit –II	b)	Problem (04 Marks
	Unit-III	c)	Problem	
	Unit-IV	d)	Problem	04 Marks



5T3-MANAGEMENT PROCESS

Objective: To equip the students with the knowledge of Management Process and inspire them to acquire required quality to face the managerial challenges.

Unit I:-

Management and Administration: - Management concept, levels of management, importance & functions of various levels of management. Administration- meaning, concept and functions of administration. Differences between Management and Administration.

Unit II:-

Managerial Development & Group Dynamics: - Need for developing managerial skills, skills required of a manager, classification of managerial skill, methods of developing skills of managers, group dynamics ,meaning & significance, types of groups, group formation development, group composition.

Unit III:-

Managerial Style: - Meaning and types of managerial styles X and Y Theory of Macgregor, factors' influencing managerial style, organization conflict- traditional and modern approaches to conflict, Management as a profession, significance of professional manager in current scenario,

Unit IV:-

Motivation: Definition, Meaning and concept of motivation, kinds of motivation and its importance, Theories of motivation- Maslow's theory of need hierarchy, Herzberg's theory of motivation, relationship between motivation & productivity.

Refefence:

- 1. Sherlekar"Management Value Oriented Holistic Approach" Himalaya Publishing.
- 2. Stephen Robbins: Organizational Behaviour, Prentice Hall of India.
- 3. Terry George: Principles of Management.
- 4. R.S.Dewedi "Human Relation and organizational behaviour.
- 5. Shejwalkar and Ghanekar: Principal and Practices of Management
- 6. Sharma, : Organisational behaviour
- 7. Saxena, Principal and Practices of Management



QUESTION PAPER PATTERN BCOM – III: SEMESTER V 5T3-Management Process

	TIME:	:- 3 Hours]		[Full Marks:- 80
		N.B	(-1) All questions are compulsory.	
			2) All questions carry equal mark	S.
0.1				
Q.1.	(a)	UNIT – I		08 Marks
	(a) (b)	UNIT – I		08 Marks
	(0)	ONII – I	OR	UO IVIAIKS
	(c)	UNIT – I	OK	16Marks
Ω	(0)	UNII – I		TOMATKS
Q.2.	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
	(0)	CIVII II	OR	00 Marks
	(c)	UNIT – I		16Marks
	(0)	CIVII I		TOTALING
Q.3.				
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT - I		16Marks
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



5T4: Indian Economy – I

Unit I:

Indian Economy & Planning

Economic Planning- Characteristics, Rationale, Features, Objectives of Economic Planning. Strategy of India's Development Plans. Objectives and Evaluation of 11th Plan. Objectives of 12th Plan. Resources allocation and financing of five years plans. Regional Planning in India- Aspects of regional planning, Conceptualization, Magnitude & Challenges. Achievements and shortcomings of India's Economics Planning. NITI Aayog-Aims, Objectives & Structure. From Economic Planning to NITI Aayog-Differences in the two Approaches.

Unit II:

Indian Economy & Policy

Concept of Economic Growth & Economic Development. Characteristics of underdeveloped/ developing countries. Broad features of Indian economy. Natural resources- Land, soil, water, forest, mineral. Infrastructure - Sources of Energy in India. Power, Coal, Oil and Gas, Atomic, Non-conventional Sources, India's Energy Strategy. Transport System in India- Railways, Road, Water & Air Transport.

Unit III-

Population & Unemployment

India's Population: Size and Growth Trends, Causes of Population Explosion, Consequences on Economic Development, Remedies, Population Policy. Employment and Unemployment- Trends, Structure of Employment in India. Nature & Estimates of Unemployment. Urban & Rural Unemployment- Causes, Effect, Government Policy for Removing Unemployment.

Unit IV:

India's Public Finance

Public Expenditure-Classification, Role of Public Expenditure in India, Causes of increase in Public Expenditure. Public Revenue-Sources of Public Revenue in India. Public Debt- Meaning, Concept, Classification, Role, Problem and Remedies. India's Fiscal Deficit-Causes, Recent Policy Measures towards Controlling Fiscal Deficit.

Books Recommended:

- 1. Indian Economy, Datt & Sundharam, S Chand
- 2. The Indian Economy: Problems and Prospects, D. R. Gadgil.
- 3. Globalization And Indian Economy, R.Chaddha, Sumit Enterprises.
- 4. Indian Economy: Problems of Development and Planning, A.N.Agrawal, New Age International.
- 5. Indian Economy, Misra & Puri, Himalaya Publishing House Pvt. Ltd.
- 6. Government of India- Five Year Plans.
- 7. Government of India- Economy Survey.
- 8. Reserve Bank of India- Annual Reports on Currency and Finance.
- 9. Indian Ecomomics, Rashi Arora, Mumbai



Question Paper Pattern Semester –V Elective–I 5T4- Indian Economics – I

N.B. – 1) All questions are compulsory.
2) All questions carry equal marks.

Time	e :- 3 ł	nours		Marks-80
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
	(-)	I INITE	OR	1CM - d-
	(c)	UNIT – I		16Marks
Q.3.				
<u></u>	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
	()	I INITE I	OR	1614 1
	(c)	UNIT – I		16Marks
Q.5.				
٧.٥.	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



5T5.1: Marketing Management

Unit – I

Introduction: Meaning and Concept of Marketing and Marketing Management. Traditional and Modern concept of Marketing, Functions and importance of Marketing Management, Market segmentation: - evaluation, criteria's, advantages and disadvantages of market segmentation, types

Unit-II

Market and pricing policies: Meaning, concept and characteristics of Consumer Market, Industrial Market and Service Market, their difference, government and reseller market, online market: - issues and challenges **Pricing policies: -** meaning, types and factors governing them.

Unit – III

Product Planning and Distribution: Product Planning – New Product Development – Product Life Cycle – Branding and Packaging, Distribution Channels for Consumer Product, Industrial Product and Service Product, Function of Distribution of Channels, Factors Affecting Distribution of Channels.

Unit – IV

Consumer behavior and Promotion:

Consumer behavior: - Meaning, concept and factors affecting consumer behavior, Customer Satisfaction, measurement of Customer Satisfaction, After Sales Services and its role in modern business, **Promotion**: techniques of promotion, Personal Selling; Advertising, Direct Marketing. E-marketing

Suggested Books:

- 1. Marketing Management, Philip Kotler and Kevin Lane Keller: Prentice Hall of India / Pearson Education, New Delhi.
- 2. Marketing Management, V. J. Ramaswami and S. Namakumari:, Macmillan Business Books, Delhi.
- 3. Principles of Marketing Management, Dr. Arvind Shende, Dr. Dilip Vairagade, Anuradha Prakashan, Nagpur.
- 4. Services Marketing; S M Jha; Himalaya Publishing House.
- 5. Industrial Marketing Practices in India- S.L. Gupta, Sanjeev Bahadur and Hitesh Gupta Excel *Books*, New Delhi.
- 6.foi.ku O;oLFkkiu&MkW-es?kk ukusVdj&lkbZukFk izdk"ku]ukxiqj



Question Paper Pattern Semester –V Elective Group–I 5T5.1- Marketing Management

N.B.-1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours	Marks-80

rks
rks
ks
rks
rks
ks
1
rks
rks
ks
KS
rks
rks
in.
ks
ırks
ırks
rks
ırks



Elective Group–I 5T5.2 : Computerized Accounting

Unit-I

Introduction - Computerized Accounting, Advantages of Computerized Accounting, Manual Vs Computerized Accounting, Need of Computerized Accounting, Accounts Organization, Accounts group, Loans, Liabilities, Assets and Budget.

Unit-II

Accounting Software's, - Introduction to Tally Software, Features of Tally, Tally Screen, Company Information, Creating new Company, Gateway, Selection of Company, Selection of Options, Buttons at Gateway, Working with multiple Companies, Company Features, Configuration – General, Numeric Symbols, Voucher Entry, Invoice Order Entry, Printing.

Unit-III

Accounts Info Menu, Account Groups – Create new group, creation of Primary group. Normal and Advance Information, Ledger Accounts, Cost Categories, Cost Centers. Creation of Budget, Types of Budget. Voucher – Voucher Entry, Creation of Voucher Screen, Types of Voucher, Selection of Voucher Types, Post Dated Voucher, Printing of Vouchers, Cheque Printing, advance Features of account Voucher.

Unit-IV

Inventory Info, Features of Inventory Info. Configure – Inventory Info, Balance Sheet, Audit trail, Ratio Analysis. Display – Accounting Report Display, Inventory report Display, and MIS Report Display. Printing Reports, Export of Data. Maintenance – Bank Reconciliation, House Keeping, Data Maintenance. Security – Users and Password, Security Controls, Types of Security, Creation New Security Levels and Tally Audit.

Books Recommended:

- Accounting with Tally: K.K. Nadhani, BPB Publication.
- Tally. ERP 9 : Prof. C. M. Tembhurnekar& Dr. D. N. Khadse , Saijyoti publication , Nagpur.
- Tally Tutorail: K.K. Nadhani and A.K. Nadhani, BPB Publication.
- Advances Accounts Vol-I: M.c.Shukla, T.S.Grewal and S.G, Gupta, S. Chand& Company, Delhi.
- Accounting Principles: Anthony R.N. and J.S. Richard, Irwin Inc.
- Advanced Accountancy By P.C. Tulsian, Tata McGraw HILL Publication.
- Microsoft Office -2000/2007- Gini Courter, Annelte Marquis BPB.
- It Today (Encyclopaedia) S.Jaiswal.
- Gulhane, Dr., Tiwari, Naidu Computarized Accounting, Sheth Publishers Pvt. Ltd. Mumbai
- A First Course In Computers Sanjay Saxena.
- First Text Book On Information Technology SrikantPatnaik.



Question Paper Pattern Semester –V Elective Group–I 5T5.2-Computerized Accounting

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours		Marks-80		
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
			OR	
	(c)	UNIT – I		16Marks
0.0				
Q.3.	(-)	LINITE III		00 Mada
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III	OR	08 Marks
	(c)	UNIT – I	OK	16Marks
Q.4.	(C)	ONII – I		TOWATES
Q. 4 .	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
	(0)	01,11	OR	0017242115
	(c)	UNIT – I		16Marks
	` '			
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



Foundattion Group—I 5T6.1 : Business Finance -I

Unit –I Business Finance-Meaning, Nature, Significance, Objects and Scope of Business Finance, Functions of Financial Executive in an Organization.

Sources of Business Finance-Long- Medium and Short Term Sources of Finance, Equity, Preference shares, Sweat equity shares, Shares with differential rights, debentures & Bonds .(Theory)

Unit – **II Project Financing**: Meaning, Steps involved in Project Financing, Appraisal of project, Means of Project finance, Aspect of Project Appraisal. (**Theory**)

Inventory Management: Need and Cost of Inventory, Economic Order Quantity under constant price and with varying price, Various inventory levels. (**Theory & Numericals**)

Leverages -Concept of Leverages, Operating and Financial Leverages. (**Theory & Numericals**)

Unit – III Management of Working Capital.

Meaning & Concept ,Need or Objects of Working Capital, types, and Advantages of Working Capital , disadvantages of Excessive Working Capital, Determinant's , assessment of Working Capital requirements(**Theory & Numericals**)

Unit – IV Debtors Management.: Introduction to Debtors Management, Cost of extending credits, Credit / discount policy, Effective cost of bill discounting. **(Theory & Numericals)**

Creditors Management: Introduction, Cost of Credit, Accruals / expenses payable as source of finance. (**Theory & Numericals**)

Venture Capital Financing: Meaning, Methods of Venture Financing, Problem areas facing the Venture Capital Industry. (**Theory**)

Books Recommended:

- 1. Financial Management Problems & Solutions :- Kishore Ravi M (Taxman Allied Service (p) Ltd.)
- 2. Fundamentals of Financial Management :- Chandra Prasanna (Tata McGraw Hill Publishing Co. Ltd.)
- 3. Management Accounting & Financial Management :-Arora M N (Himalaya Publishing House Pvt. Ltd.)
- 4. Business Finance : Dr.Jain V. K. ,And Sharma D.G. (Shethe publishers PVT. LTD.



Question Paper Pattern Semester –V Foundattion Group–I 5T6.1-Business Finance -I

N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.

Time :- 3 hours	Marks-80
-----------------	----------

Q. No. 1 – Unit I			
	a) Theory		08 Marks
	b) Theory		08 Marks
	•	OR	
	c) Theory		08Marks
	c) Theory		08Marks
Q. No. 2 – Unit II			
	a) Theory		08 Marks
	b) Theory		08 Marks
		OR	
	c) Problem		08 Marks
	d) Problem		08 Marks
Q. No. 3 – Unit III			
Q. 110. 5 Cilit III	a) Theory		08 Marks
	b) Theory		08 Marks
	, <u></u>	OR	
	c) Problem		08 Marks
	d) Problem		08 Marks
Q. No. 4 – Unit I	,		
	a) Theory		08 Marks
	b) Problem		08 Marks
		OR	
	c) Problem		08 Marks
	d) Problem		08 Marks
O. No. 5 - Unit- I	2)	Theory 04 M	a ulva
	a)	Theory 04 M Problem 04 1	
Unit –II Unit-III	b)	Problem 041	
Unit-IV	c) d)	Problem 04	
Omt-1 v	*		
	roulic	dattion Gro	սի–ւ



5T6.2 : Auditing

UNIT- I: Basic of Auditing

- (i) Audit, Auditing and Auditor: Meaning, definition, object and scope of Audit and auditing, basic principles governing an audit, Advantage and Disadvantages of Audit, Difference between Internal Audit and External Audit, Types of Audit: Meaning, Objective and Importance of Continuous Audit, Annual Audit, Periodical Audit, Internal Audit.
- (ii) Internal Control and Internal Audit System: Meaning, definition, advantages and disadvantages of Internal Control, Internal Check, Internal Audit, EDP Audit: Meaning of EDP audit, Control in EDP (Electronic Data Processing) Environment- General EDP Control, Application Control

UNIT- II: Audit Working and Procedure.

- **i)**Audit Planning, Evidence Audit programme: Meaning and Definition, Objective, Advantages and Disadvantages of Audit Programme, Formulation of audit programme, precaution to be taken for preparation of audit programme.
- **ii**) Audit Documentation and Evidence: Meaning, definition, content, advantages of audit note book, audit working paper, essential of good audit working paper, Ownership and custody of audit working paper, Audit evidence, Method of obtaining audit evidence

UNIT-III

- (i) **Standard on Auditing**: Standard Auditing Policies- Introduction of auditing standard issued by ICAI (From AAS-1 to AAS -30 and AAS-34)
- ii) Vouching & Verification

Vouching: Meaning and definition of vouching, objective, importance and limitation of vouching, Vouching procedure and precaution to be taken for vouching of - Cash book, purchase book, sales book.

iii) Verification of Assets and Liabilities: Meaning, object, importance and limitation of Verification. Audit of Fixed Assets, Current Assets, General principle regarding verification of assets, Audit of Liabilities, General principle of regarding verification of liabilities.

UNIT- IV: Company Audit & Audit Report

- (i) Company Auditor: Legal provision related with appointment of auditor under Companies Act 2013, Qualification and disqualification of auditor, Right, Power, and liabilities of company auditor, civil and criminal liabilities of company auditor, Legal provision related with remuneration, removal of company auditor.
- (ii) Company Audit : Meaning, definition, feature, objective, advantages and criticism of Financial audit, Management audit, Special audit, Cost Audit, Difference between Financial audit and cost audit, Management audit and financial audit.
- iii) Audit report and Certificate: Meaning, definition, content, scope and significance of audit report

Reference Books:

- Aruna Jha: Students Guide to Auditing and Assurance, Taxman Publication, New Delhi
- S.D. Sharma: Auditing Principle and Practice, Taxman Publication, New Delhi
- Dr. Arvind shende, Dr. Dilip Vairagade; Auditing-Anuradha Prakashan, Nagpur.
- L. N. Chopde, D.H. Choudhari, Dr. Baban Taywade: Auditing Sheth Publishers
- Dr. K. R. Dixit: Auditing Vishwa Publishers & Distributors, Nagpur
- B. N. Tandon, S. Sudharsanam, S. Sundharabahu: Practical Auditing S. Chand & Company Ltd.
- S. K. Mehta: Auditing, Diamond Publication Pune



Question Paper Pattern Semester –V Foundattion –I 5T6.2Auditing

	TIME	:- 3 Hours]		[Full Marks:- 80
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
		******	OR	457.4
	(c)	UNIT – I		16Marks
0.2				
Q.3.		IINIT III		08 Marks
	(a) (b)	UNIT – III UNIT – III		08 Marks
	(0)	UNII – III	OR	Oo IVIAIKS
	(c)	UNIT – I	OK	16Marks
Q.4.		01411 - 1		Tolviarks
Q.1.	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
	(0)		OR	0011201111
	(c)	UNIT – I		16Marks
	()			
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



Allocation of marks for all subjects-

1a	Two perio	Two periodical class tests				
1b	An assign	An assignment/Viva/Group Discussion/Seminar based on curriculum to				
	be assesse	be assessed by the teacher concerned				
1c	Overall co	Overall conduct as a responsible learner				
1		Internal assessment Total marks	20 marks			
2	Unit- I	20 marks				
	Unit-II	20 marks				
	Unit-III	20 marks				
	Unit-IV	20 marks				
		Semester wise End Examination marks				
			80 marks			
		Total marks per subject	100 marks			



Vocational Course: Semester V (Same syllabus for all vocational group subjects in B.Com - I) 5T7:Entrepreneurial Development-I

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Level of knowledge: Basic knowledge

Objective: To provide knowledge regarding documentation franchising and business plan.

Unit-I

Documents:- Types of documents - Commercial, Regulatory and Assistance Document, procedure of processing of an export order.

Unit-II

Franchising and Financing:- Definition, Advantages, Disadvantages of franchising in India, Financing of new ventures – Types of finance – Short, Medium and Long Term.

Unit-III

Business Plan – Meaning of Business Plan, Importance and Preparation of Business Plan, Financial and Social aspects of Business Plan.

Unit-IV

Meaning and Concepts - Management, Marketing, Accounting, Inventory Management, Working Capital Management, Human Resource Management and Total Quality Management.

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande : Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.

Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House



Group – I : Computer Applications 5T8.1 : Web Designing using HTML (WD) Paper - I

Time: 3 Hours Theory: 80

Marks

Practical: 20 Marks

Unit -I:

HTML: Introduction, Designing web site, Advantages and Disadvantages of HTML, Flow of Web Information, Role of Web Browser and Web Server, Process of Web Publishing,

Creating a Simple Static Web Page : About HTML, Basic elements : https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, https://example.com/html, <a href="https://example.com/

Unit -II:

Hyperlinks <a href ...>, Creating links to web pages and URLs, Creating links within the same page, various types of URLs that can be used in links, Image tag and their related attributes, Inline images, Links to (external) images, Using Inline images, Using images as hyperlinks, Popular images formats for internet and HTML.

Tables: Basic table tags and their related attributes.

Unit -III:

Frames, Image Map and Web Font Creator: Frames and their creation, the <Frame> and <Frameset> tags, Frame linking, Floating or Inline Frames, Image Maps <map> and <area> tags, Client – Side and Server – Side image maps.

Unit -IV:

Form designs, Form Controls, Text controls, password fields, radio buttons, checkboxes, reset and submit buttons, form control selection, option processing and textarea.

Practical: The Practical will be based on HTML

BOOKS RECOMMENDED:

1. Web Publishing : Monic D'souza and J D'souza

2. Complete HTML : BPB

3. E-Commerce : Bhushan Dean – S. Chand

4. HTML – 4 Unleashed : SAMS

5. Dynamic HTML : O'RELLY (SPD)



(Semester - V)

Group - II: Principles & Practice of Insurance 5T8.2-Insurance and Acturial Science - Paper I

Time: 3 Hours] Theory: 80 Marks
Internal Assessment: 20 Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about Insurance and Actuarial Science

Unit - I

- Investment of Insurance Funds
- Nature and Method of According procedure in Life Insurance and General Insurance
- Meaning of policy values, retrospective policy value, prospective policy value, symbols of policy value, calculation of policy value, progress of policy value

Unit - II

- Risk selection, Identification of Risk, Principles of Risk Management, Sources of Risk Information
- Rate Making, Types of Rate Making, Principles of Rate Making

Unit -III

- Acturial Science: Meaning, Nature of actuarial science, scope of actuarial science in Finance, economics, statistics, Mathematics and computer science
- Concept of terms: Accumulated value and present value ,Nominal and effective rates of Interest, Discount and Discounted value, Redemption of Loan, Sinking fund.

Unit-IV

- Annuities : Meaning and classification of Annuities, perpetuities, immediate annuities
- Mortality ,Meaning, Nature of Mortality, Factors included in construction of Mortality Table I and II, Survival rate , Death rate

Recommended books:

- Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.
- Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House
- Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication



- Principles of Insurance, Dr. Shakti Pratchbal and Dr. N.P. Dwivedi, Himalaya Publishing House
- 🗹 बीमा के सिध्दांत एवं व्यवहार भगवती प्रकाळा आर्मा, राजीव जैन, पुरूशोत्तम दयाल— हिमालया पब्लिळांग हाऊस



V - Semester

5T8.3- Advertising, Sales Promotion and Sales Management – III Il Marks : 80 Time : 3 Hours

Full Marks: 80 Time: 3 Hours
Internal Assessment: 20

OBJECTIVES:
$\ \square$ To expose students to the principles and practices of advertising and sales promotion and
develop the conceptual abilities in this functional area of marketing. \square

☐ To develop the skills of the students, which will help them to prepare effectively for a career in the advertising and sales promotion function of any company or in the advertising

CONTENT:

Unit-I

- Communication Process - Communication models for rural communication and urban communication

Unit-II

- Advertising - Organizational structure of advertising agency and its functions. Evaluation of agency functioning, Creativity in Advertising including Message development, copy righting, layout; Media selection

Unit-III

- Advertising Research. Effectiveness of advertising- methods of measurement. Rationale of testing Opinion and Attitude Tests, Recognition, Recall

Unit-IV

- Message Strategy: Attention and comprehension, Associating Feelings with the Brand, Brand Equity, Image and Personality and Group Influence and word of month advertising **Recommended books:**
 - Advertising Management Concepts and Cases, Manendra Mohan (Tata McGraw Hill)
 - Sales Promotion and Advertising Management (6thEd.)Himalaya Publishing House
 - Advertising Excellence by Bovee, Thill, Dovel and Wood (McGraw Hill)
 - Advertising Management Shelekar, Victor & Nirmala Prasad (Himalaya Publishing House)
 - Foundations of Advertising Theory & Practice S.A. Chunawala
 - Brand Positioning Subroto Sengupta, Tata McGraw Hill



SEMESTER V QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development &ASM

	TIME:	- 3 Hours]		[Full Marks:- 80
			N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.	
Q.1.				
	(a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.2.((a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.3.				
	(a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.4(a	a) UNI	$\Gamma - I$	8Mar	ks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.5.	Answer	in Brief		
	(a)	UNIT – I		4 Marks
	(b)	UNIT – II		4 Marks
	(c)	UNIT – III		4 Marks
	(d)	UNIT – IV		4 Marks



B.Com. Third Year

Semester-VI

6T1-Financial Accounting- V

Unit-I- Accounts of Holding Company-

Introduction, Meaning of Wholly-owned subsidiary, partly-owned subsidiary, preparation of Consolidated Balance Sheet and Profit and Loss Account, simple problem on involving two companies only.

Unit-II- Insurance Claims

Introduction, oss of stock Average clause practical problem on loss of stock.

Unit-III- Investment Accounts

Meaning, Need, Utility and objectives, Sales and Purchase of different types of Securities, Simple problem on Investment and Securities.

Unit-IV- Profit prior to incorporation-

Meaning Methods of ascertain the pre-incorporation profit, Issue and Redemption of preference shares Redemption out of new issue of shares Redemption at premium out of new issue of shares, Redemption out of profit.

Books

S. N. Maheshwar :- Financial Accounting – Vikas Publishing House, New Delhi
 Advanced Financial Accounting – S. Chand & Sons
 Advanced Financial Accounting – Himalaya Publication House
☐ Shukla and Grewal: Advanced Accounts (S. Chand & Ltd. New Delhi)
unts (Kalyani Publishers, Ludhiana)
-I and II (New Central Book Agency,
Kolkata)
□ R. KLele and Jawaharlal: Accounting Theory (Himalaya Publishers)
- Advance Accounting – Himalay Publication
24
□ Prof. PradeepWath, Dr. R. D. Mehta, Dr. DilipGotmare :- Financial Accounting—
Paval Prakashan



Question Paper Pattern Semester -VI 6T1-Financial Accounting – V

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3 hours	2) i iii questions eur	Marks-80
Q. No. 1 – Unit I		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16Marks
Q. No. 2 – Unit II		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 3 – Unit III		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
Q. No. 4 – Unit I		
Q. 1 (8) . SIII 1	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	c) Problem	16 Marks
0 W 7		D 11 0434 1
Q. No. 5	a) Unit- I	Problem 04 Marks
	b) Unit –II	Problem 04 Marks
	c) Unit-III	Problem 04Marks
	d) Unit-IV	Problem 04 Marks



Semester-VI 6T2-Management Accounting

Unit_I

Management Accounting:-

Meaning, Scope, Importance, and Limitations of Management Accounting. Difference between Cost Accounting and Management Accounting, Role of Management Accounting. Break -Even Point Analysis (**Theory & Numericals**)

Unit – II

Business Budget & Budgetory Control:

Meaning, Characteristics, Objectives, Advantages, Limitations. Classification & Types of Budgets. Problems on Cash Budget and Flexible Budget Only (**Theory & Numericals**)

Unit – III

Ratio Analysis:

Meaning, Importance and Limitations of Ratio Analysis, Classification of Ratio, Computation of Profitability Ratio, Financial Ratio with special reference to Current Ratio, Acid Test/Liquid Ratio, Inventory Turnover Ratio Debtors and Creditors Turnover Ratio, Fixed Assets Turnover Ratio, Debt-Equity Ratio, Working Capital Ratio, , Earnings per Share Ratio. (**Theory & Numericals**)

Unit - IV

Fund Flow Analysis:

Meaning, Sources of fund, Uses of fund, Distinguish between fund flow statement and Balance Sheet. Preparation of Statement showing Changes in Working Capital, Profit from operation, Fund flow Statement (**Theory & Numericals**)

Books Recommended -

- S. N Maheshwari: Cost Accounting Theory and problems –Shri Mahavir Book Depot, New Delhi
- V.K. Saxena: Cost Accounting Text Book-Sultan Chand and Sons New Delhi
- M.C. Shukls T.S. Grewal, M.P. Gupta Cost Accounting S. Chand, New Delhi
- R. S. N. Pallai, V Bhagavathi Cost Accounting S. Chand, New Delhi
- S. M. Shukla :- Cost Accounts (Hindi)
- Nigam R. S. Advanced Cost Accounting, S. Chand & Company
- Jain S. P. Advanced Cost Accounting Kalyani Publication
- Gawada, J Made Advanced Cost Accounting Himalaya Publication House
- Pillai R. S. N. Management Accounting S. Chand & Co. Pvt. Ltd.
- Agrawal N. K. Managements Accounting Galgotia Publication
- Singh, Jagwant Managements Accountings KitabMahal
- Rathnam P. V. Managements Accountings KitabMahal
- Sharma R. K. Managements Accountings Kalyani Publication

Question Paper Pattern Semester –VI



6T2-Management Accounting

Time:-	3 hours				Marks-80
		N.B. – 1) All qu		÷ *	
		2) All question	ons carry ed	qual marks.	
Q. No. 1 – Un	it I				
		a) Theory		08 Marks	
		b) Problem		08 Marks	
		\ D	OR	1614 1	
		c) Problem		16Marks	
Q. No. 2 – Un	it II				
		a) Theory		08 Marks	
		b) Problem		08 Marks	
		\ 5 11	OR	4636.1	
		c) Problem		16 Marks	
Q. No. 3 – Un	it III				
		a) Theory		08 Marks	
		b) Problem		08 Marks	
		\ 5 11	OR	46361	
		c) Problem		16 Marks	
Q. No. 4 – Uı	nit I				
		a) Theory		08 Marks	
		b) Problem		08 Marks	
		\ D	OR	16.35.1	
		c) Problem		16 Marks	
Q. No. 5 -	Unit- I	a)	Problem	04 Marks	
	Unit –II	b)		04 Marks	
	Unit-III	c)		04Marks	
	Unit-IV	d)	Problem	n 04 Marks	



Semester VI 6T3-Advanced Statistics

UNit I

Correlation- Types of correlation, Karl Pearson's coefficient of correlation in Bivariate frequency table, probable error, interpretation of 'r', Rank Correlation Method.

Unit II

Regression Analysis- Lines of Regression/Regressions Equation, Coefficient of regression for a Bivariate frequency table.

Unit III

Index Number- Uses of I N, Types of I No. Methods of Index Number. Test of consistency of Index No.- unit test Time Reversed Test, Factor cost of living Index No.

Unit IV

. Time series Analysis-Introduction components of a Time series— a) Trend b)Short Term Variation c)Irregular variation d)Measurement of Trend- (Simple Problems)
Graphic Methods ,Methods of Seminar,Methods of Curve by the square
Methods of Movig Average



6T4- Indian Economy – II Unit I: Indian Agriculture

Nature, Role of Agriculture in Indian Economy. Cropping Pattern in India and its Determining Factors. Land Reforms. Cooperative Farming & Marketing. Green Revolution: Impact and Constraints. Cause & Remedies to Low Agricultural Production and Productivity. Agriculture Marketing-Problems & Remedies. Agricultural Labour - Problems & Remedies. Sources of Agriculture Finance. NABARD (National Bank for Agriculture and Rural Development). Financial Inclusion. Agricultural Price Policy-Objectives and Constituents. Agricultural Subsidies in India. Crop & Live Stock Insurance -Problems and Remedies.

Unit II: Indian Industry

Industrial Policy 1991. Small Scale and Cottage Industries- Role, Performance, Problems and Remedies. Public Sector Industries - Role, Performance, Problems and Remedies. Privatization of Public Sector Industries: Meaning, Methods of Privatization Policy in India. Arguments in favor and against privatization. Policy of Disinvestment. Industrial Sickness in India- Definition, Causes, Effects, Remedial Measures. Indian Trade Union Movement: Role, Functions, Strength and Weaknesses.

Unit III: Indian Service Sector

Growth of Services Sector in India. Nature, Scope, Trends & Importance of Service Sector in Current Scenario. Share of Service Sector in India's Employment Generation. Contribution of Service Sector to India's GDP. Government's reforms in various Services. IT & ITES Sector-Trend, Role & Importance. Challenges and Opportunity in IT & ITES Sector. Banking & Insurance Sector-Importance of Banking and Insurance Industry in India's Service Sector, Challenges and Opportunities.

Unit IV: India's International Trade

Foreign Trade -Concept and Meaning, Advantages, Disadvantages, Composition and Direction of India's Exports & Imports. Special Economic Zones- Concept, History, Benefits, Arguments against SEZS. Foreign Capital and Aid- Need, Role, Problems. India's External Debt. Multinational Corporations(MNCs)- Role, Importance, Advantages and Disadvantages. Impact of MNCs on Indian Economy. Liberalization, Privatization, Globalization(LPG)- Meaning, Role, Impact of LPG on Indian economy. World Trade Organization (WTO)- Objectives, Working and Functions, WTO & India.

Books Recommended:

- 1. Indian Economy, Datt & Sundharam, S Chand.
- 2. The Indian Economy: Problems and Prospects, D. R. Gadgil.
- 3. Globalization And Indian Economy, R.Chaddha, Sumit Enterprises.
- 4. Indian Economy: Problems of Development and Planning, A.N.Agrawal, New Age International.
- 5. Indian Economy, Misra & Puri, Himalaya Publishing House Pvt. Ltd.
- 6. Government of India- Five Year Plans.
- 7. Government of India- Economy Survey.
- 8. Reserve Bank of India- Annual Reports on Currency and Finance.



Question Paper Pattern 6T4- Indian Economy – II

N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.

Time	:- 3 ho	urs		Marks-80	
Q.1.					
	(a)	UNIT – I		08 Marks	
	(b)	UNIT – I		08 Marks	
Q.2.	(c)	UNIT – I	OR	16Marks	
	(a)	UNIT – II		08 Marks	
	(b)	UNIT – II		08 Marks	
	(c)	UNIT – I	OR	16Marks	
Q.3.					
	(a)	UNIT – III		08 Marks	
	(b)	UNIT – III		08 Marks	
Q.4.	(c)	UNIT – I	OR	16Marks	
Q	(a)	UNIT – IV		08 Marks	
	(b)	UNIT – IV		08 Marks	
	(c)	UNIT – I	OR	16Marks	
Q.5.					
	a)	UNIT – I		04 Marks	
	b) c)	UNIT – II UNIT – III		04 Marks 04Marks	
	d)	UNIT – IV		04 Marks	



Elective Group- II 6T5.1- Human Resource Management

UNIT-I

Introduction

Human Resource Management, Definition, Objectives, Functions, Scope, Importance. Quality of a ideal Human Resource Managers

UNIT-II

Recruitment selection and training

Recruitment: - meaning, source; selection process and importance, placement and induction, career planning v/s manpower planning

Training: - meaning, method, training and development,

UNIT-V

Labour welfare and Collective bargaining

Labour welfare: - Safety and Health Measures Workers Participation in Management - Objectives for Wage Incentive - Fringe Benefits

Collective Bargaining - Features - Pre-requisite of Collective Bargaining - Agreement at different levels, Successful Participation of workers in Management.

UNIT-IV

Human resource planning and accounting

Human Resource Planning - Human Capital Investment - Expenditure vs. Productivity Meaning and Definition of Human Resource Accounting, Importance; Human Resource Accounting - Measurement of Human Value addition into Money Value

Suggested Books:

- 1. Human Resource Management Dr. C.B. Gupta Sultan and Sons.
- 2. Personnel & Human Resource Management P. Subba Rao Himalaya Publishing House.
- 3. Human Resource and Personnel Management K. Aswathappa Tata Mc Graw Hill Publishing Co. Ltd.

Human Resource Management, Dr. Arvind shende, Dr. Dilip Vairagade, Dr. Devendra. Mohture, Anuradha Prakashan, Nagpur.

- 4. Personnel Management & Human Resources C.S. Venkata Rathnam & B.K. Srivastava. TMPL.
- 5.ekuoh; lallk/ku O;oLFkkiu & MkW-es?kk ukusVdj&lkbZukFk izdk''ku]ukxiqj



Question Paper Pattern 6T5.1- Human Resource Management

N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.

Time	:- 3 ho	urs		Marks-80
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.3.				
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.4.				
	(a)	UNIT – IV		08 Marks
	(b)	UNIT – IV		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.5.				
	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



Semester-VI 6T5.2-Indirect Taxes

UNIT-I: Central Excise Laws

Basis of chargeability of duties of central excise-goods, manufacture, classification and valuation of excisable goods; Registration and routine procedures in central excise, payment of duties of excise and removal of goods, Cenvat on inputs and on capital goods, excise and small scale industries.

UNIT-II: Customs Laws

Nature of customs duty, types of customs duty, classification for customs and rate of duty, valuation for customs duty, procedures for import and export.

UNIT-III: Service Tax

Charging of service tax, Services on which tax is payable, registration, records to be maintained by the assessee, returns and payment of tax, Provisions of law and procdures.

UNIT-IV: State Sales Tax Law

Basic Concepts, value added tax on sale or purchase of goods, levy or incidence of tax, goods liable to tax, rate of tax and exemptions, dealer and registration method of computing tax liability, credit, set-off and refunds, documents, records and maintenance of accounts, returns and assessments (the state sales tax law applicable will be the Bombay Sales Tax Act or the new sales tax enactment in its place).

Central Sales Tax Act, 1956

Definitions, Concepts of inter-state sales, Sale outside the state, sale in the course of export and import, Liability to tax and rate of tax, Registration of dealers.

Reference Books

Dr. H. C. Mehrotra and S, P. Goyal: Direct and Indirect Taxes (Sahitya Bhawan, Agra)

V. S. Datey: Indirect Taxes Law and Practice (Taxman, New Dehli)

V. Balchandran: Indirect Taxes (Sultan Chand & Sons, Dehli)

C. A. Farooq Haque : Indirect Tax (Sheth Publishers Ltd., Mumbai)



Question Paper Pattern Semester -VI 6T5.2-Indirect Tax

N.B. - 1) All questions are compulsory.

2) All	questions	carry equ	ıal marks.

TT: 2.1	2) An questions car	• 1
Time :- 3 hours		Marks-80
Q. No. 1 – Unit I		
Q. 140. 1 – Omt 1	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	OO WAKS
	a) Theory	08 Marks
	b) Problem	08 Marks
	<i>5)</i> 110010111	oo Marks
Q. No. 2 – Unit II		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	a) Theory	08 Marks
	b) Problem	08 Marks
Q. No. 3 – Unit III	,	
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	a) Theory	08 Marks
	b) Problem	08 Marks
	,	
Q. No. 4 – Unit I		
	a) Theory	08 Marks
	b) Problem	08 Marks
	OR	
	a) Theory	08 Marks
	b) Problem	08 Marks
Q. No. 5	a) Unit- I	Problem 04 Marks
Q. 140. 3	a) Unit- I b) Unit –II	Problem 04 Marks
	c) Unit-III	Problem 04 Marks Problem 04Marks
	d) Unit-IV	Problem 04 Marks
	u) UIIII-I V	I TOUTCHI U4 IVIALKS



Foundation Group II 6T6.1- Business Finance – II

Unit – I

Financial Market in India: significance of Financial Markets, Objectives and functions of the financial System, Types of Financial Markets,

Money Market- Meaning, features, functions, Composition

Capital Market- Meaning ,Composition & Structure of Capital Market Market segment. Products and Participant's in Primary market. Regulatory authorities governing financial and capital market.

SEBI - (Security Exchange Board of India)Organisational structure of SEBI, Rol*e* and Functions of Stock Exchange and SEBI, Regulation issued by SEBI, Achievements of SEBI.(Theory)

Unit – II Primary Market: Meaning, Functions, Scope & Significance of PrimaryMarket, Developments in the Primary Market, Primary Market Intermediaries.

Secondary Market: Meaning, Difference between Primary Market & Secondary Market, Products dealt in the Secondary Market, Stock Exchange, Secondary Market Intermediaries. Listing Procedure. NSE and BSE. (**Theory**)

Capital Budgeting - Meaning, Nature and Importance of Capital Budgeting, Investment Appraisal Techniques, Pay Back Period Method, Rate of return method, Net Present Value Method, Discounted Cash Flow Method, (Theory & Numericals)

Unit – III NBFC's- Meaning, Formation of NBFC's, Types and Regulation of NBFC's,

Credit Rating: Meaning /Concept, Scope & Significance of credit rating, Benifits to Investors. Credit Rating Agency in India CRISIL, ICRA, CARE. (**Theory**)

Dividend Policies- Essentials of Sound Dividend Policy, Determination of Dividend Policy and its types ,Surplus and Reserve Policy, (**Theory & Numericals**)

Unit -I V - Cash Flow for Investment Analysis- Meaning, Benefits and Uses of Cash Flow Statement. Significance, Limitations of Cash Flow Statement.

Format of Cash Flow Statement as per AS-3. (Theory & Numericals)

Books Recommended:

Financial Management Problems & Solutions :- Kishore Ravi M (Taxman Allied Service (p) Ltd.)

Fundamentals of Financial Management :- Chandra Prasanna (Tata McGraw Hill Publishing Co. Ltd.)

Management Accounting & Financial Management :-Arora M N (Himalaya Publishing House Pvt. Ltd.)

Business Finance : Dr.Jain V. K. ,And Sharma D.G. (Shethe publishers PVT. LTD.



Question Paper Pattern Foundation Group II

6T6.1- Business Finance – II

N.B. - 1) All questions are compulsory.

2) All questions carry equal marks.

Time :- 3	hours	2) All Q	uestions car	ry equal marks.	Marks-80
O No 1 Hr	si≠ T				
Q. No. 1 – Ur	111, 1	a) Theory		08 Marks	
		a) Theoryb) Theory		08 Marks	
		b) Theory	OR	UO IVIAIKS	
		c) Theory	OK	08Marks	
		c) Theory		08Marks	
		c) Theory		Oolvianks	
Q. No. 2 – Ur	nit II				
Q.110.2 01		a) Theory		08 Marks	
		b) Problem		08 Marks	
		,	OR		
		c) Problem		16 Marks	
Q. No. 3 – Ur	nit III				
		a) Theory		08 Marks	
		b) Problem		08 Marks	
			OR		
		c) Problem		16 Marks	
O N 4 II	· • •				
Q. No. 4 – U	nit I	a) Theory		08 Marks	
		a) Theoryb) Problem		08 Marks	
		b) Flobleiii	OR	UO IVIAIKS	
		c) Problem	OK	16 Marks	
		c) i robiciii		10 Warks	
Q. No. 5 -	Unit- I	a)	Theory 04		
	Unit –II	b)	Problem (
	Unit-III	c)	Problem		
	Unit-IV	d)	Problem	04 Marks	



Foundation Group II 6T6.2- Industrial Law

Level of Knowledge: Basic Conceptual Knowledge

Objective: To make students aware about Various Laws relating to Industries [with amendments up to June 2016 in respective Acts]

Unit -I

- (i) Indian Factories Act-1948: Important Definitions, Object & Scope, Provision regarding workers Health, Provision regarding Safety of Workers,
- (ii) Rules regarding Labour Welfare, Provision regarding Adults, women workers and Young Workers.
- (iii) Industrial Dispute Act-1947: Concept, Objectives and Significance, Authorities for settlement of Industrial Dispute-their work procedure & Powers,
- (iv) Concept and Distinction between Strike, Lockouts, Layoff & Retrenchments

Unit-II

- (i) Law relating to Wages: Object, Scope and Application of Minimum Wages Act-1948 and Payment of Wages Act 1936
- (ii) Law Relating to Bonus and Gratuity: Object, Scope and Application of Payment of Bonus Act 1965 and Payment of Gratuity Act 1972
- (iii) Law Relating to Employee State Insurance and Provident Fund: Object, Scope and Application of The Employee's State Insurance Act 1948 and Employee's Provident Fund & Miscellaneous Provision Act 1952
- (iv) Law Relating to Workmen Compensation and Maternity Benefits: Object, Scope and Application of Workmen Compensation Act-1923 and Maternity Benefits Act 1961

Unit-III

- (i) Child Labour (Prohibition and Regulation) Act 1986: Object Scope and Application
- (ii) Trade Union Act 1926: Object Scope and Application. Regsitration of Trade Union.
- (iii) International Labour Organization (ILO): Background and Importance of ILO and its impact on Indian Labor Laws
- (iv) Contract Labour Act: Object Scope and Application

Unit-IV

- (i) Meaning and Nature of Industrial Estate, Software Technology Park, SEZ, Co-operative Industrial Estate
- (ii) Intellectual Property Rights Law In India: Object and Scope of Patent, Copyrights, Trademark and Industrial Design
- III) Procedure for registration of Trademarks and Copyrights.
- (IV) Environment Protection Act 1986: Objective and Scope, Location of Industries, Processes & Operation, offense and Penalties

Reference Books:



- Business Law Including Company Law, Gulshan, S S and Kapoor, G K:, New Age International (P) Ltd., Publishers
- Business Law, M.C. Kuchhal and Vivek Kuchhal, Vikas Publishing House, New Delhi
- Business and Corporate Laws, V.S. Datey, Taxman, New Delhi
- Mercantile Law, N.D. Kapoor, Sultan Chand & Sons, Educational Publishers, New Delhi.
- Business & Industrial Law, Dr. Arvind shende, Dr. Mohture, Dr. Dixit, Anuradha Prakashan Nagpur.

Question Paper Pattern Foundation Group II 6T6.2- Industrial Law

	TIME:	:- 3 Hours]		[Full Marks:- 80
Q.1.				
	(a)	UNIT – I		08 Marks
	(b)	UNIT – I		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.2.				
	(a)	UNIT – II		08 Marks
	(b)	UNIT – II		08 Marks
			OR	
	(c)	UNIT – I		16Marks
Q.3.				
	(a)	UNIT – III		08 Marks
	(b)	UNIT – III	OD	08 Marks
	()	I INITE I	OR	1614 1
0.4	(c)	UNIT – I		16Marks
Q.4.		UNIT – IV		08 Marks
	(a) (b)	UNIT – IV UNIT – IV		08 Marks
	(0)	OMII – IV	OR	00 Warks
	(c)	UNIT – I	OK	16Marks
Q.5.		OTVIT I		TOWARKS
Q. 3.	a)	UNIT – I		04 Marks
	b)	UNIT – II		04 Marks
	c)	UNIT – III		04Marks
	d)	UNIT – IV		04 Marks



Allocation of marks for all the subjects

1a	Two perio	dical class tests	08marks					
1b		An assignment/Viva/Group Discussion/Seminar based on curriculum to be assessed by the teacher concerned						
1c	Overall co	Overall conduct as a responsible learner						
1		Internal assessment Total marks	20 marks					
2	Unit- I	20 marks						
	Unit-II	20 marks						
	Unit-III	20 marks						
	Unit-IV	20 marks						
		Semester wise End Examination						
		marks	80 marks					
		Total marks per subject	100 marks					



Vocational Course : Semester VI 6T7- Entrepreneurial Development-I

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Unit-I

Government policy and schemes for setting up agricultural & rural industries, financing schemes for khadi and village industries, small scale industries. WTO and small & village industries.

Unit-II

Incentives and Subsidies – Meaning of Incentives and Subsidies, Need and problems of Incentives and Subsidies, Incentives for development of backward areas.

Unit-III

Entrepreneurial systems – Search for a business ideas, sources of ideas, idea processing and selection, role of industrial fairs.

Unit-IV

Concept of cyber space and internet – importance of cyber marketing, internet usage applications, Technology as driver for entrepreneurship.

Books Recommended:

- ✓ Dynamics of entrepreneurial development and management, Vasant Desai
- ✓ Entrepreneurial development, Vasant Desai.
- ✓ Entrepreneurial Development, S. S. Khanka, S. Chand Publishers.
- ✓ M.V. Deshpande : Entrepreneurship of small scale industries.
- ✓ Entrepreneurship Development and Business Communication, Vasant Desai and Urmila Rai, Himalaya Publishing House.
- ✓ Entrepreneurship Development in India, Dr. C. B. Gupta and Dr. N.P. Srinivasan, Sultan Chand & Sons.
- ✓ Entrepreneurial Development, Vasant Desai, Appannaiah, Reddy and Gopal Krishna, Himalaya Publishing House.



Group – I: Computer Applications 6T8.1 : Introduction to Visual Basic (IVB)

Time: 3 Hours Theory: 80

Marks

Practical: 20 Marks

Unit -I

Introduction to Visual Basic, Event driven programming, Programming constructs - Variables, Types of Variables, Data Types, Scope of Variables, Constants, system defined functions, Operators (Precedence and Associatively), Creating User Interface, VB Controls (Label, Text box, Command button, Frame, Check box, Option button,

Unit -II

List box, Combo box, Timer, Drive list box, Directory list box, File list box, Horizontal and vertical scroll bars, Image, Picture box, Shape, Line, Data, OLE container), Microsoft windows common controls (Tab Strip, Tool bar, Status Bar, Progress Bar, Tree View, List View, Image List, Slider, Date Picker, Month View)

Unit –III

Working with Procedure, Function and Modules (Form, Class, Standard Modules) Scope of Procedures, Calling Procedures, Calling Functions, Passing Arguments, Control Structures: If-Then, If-Then-Else, Select Case, Loops Structures: Do-While, While -Wend, For-Next, For-Each, With-End With.

Unit - IV

Arrays: Declaring an Array, Types of Array (Fixed arrays, Single-dimensional arrays, Multidimensional arrays, Dynamic arrays), Control Array.

Menus : Creating Menus, Adding Menu Items, Adding Code for the Menus, Modifying menus at run time, Creating Pop-Up Menus.

Database connectivity through data access object. Types of recordset , setting properties and record editing & updating , searching records.

Practical: Practical will be based on Visual Basic

BOOKS RECOMMENDED:

- 1. PAUL SHERIFF TEACHES VB-6 BY SHERIFF (PHI)
- 2. VISUAL BASIC: PETER WRITES
- 3. LEARN VB 6 BY HALVARSON (MICROSOFT/PHI)
- 4. VB PROGRAMMING FOR A ABSOLUTE BEGINNER MICHAEL VINE (PHI)
- 5. VISUAL BASIC: SUPPER BIBLE TECH MEDIA
- 6. VISUAL BASIC: STEPHEN SOLOSKY (PHI)
- 7. COMPLETE REFERENCE VISUAL BASIC TATA MCGROW HILL



8. FRONT END DEVELOPMENT USING VISUAL BASIC BY DR. S.B.KISHOR(DASGANU)

9.

Group -: Principles & Practice of Insurance 6T8.2 -Insurance and Acturial Science - Paper II (Semester - VI)

Time : 3 Hours]

Theory: 80 Marks

Internal Assessment: 20

Marks

Level of knowledge - Basic knowledge.

Objective - To create awareness regarding basic knowledge about Insurance and Acturial Science

- **Unit I--** Privatisation of Insurance Business in India, Contribution of Private sector, Liberalisation required for privatization, Effect of globalization on Insurance sector.
- Methods of payment of amount insured, premium as consideration for insurance benefits, , nature of installment premiums.

Unit – II

- General Insurance Corporation(GIC) of India: Background, main provisions of General Insurance Act 1972, Establishment and objectives, Functions of subsidiary companies
- Banc assurance Meaning, nature and scope
- Insurance Innovation Innovation ,use of Technology by Insurance Industry\

Unit - III

- Policy Value Meaning ,Types of Policy value, equation, Alternaation of policy contracts
- Special reserves : Meaning, types of services maintained in Insurance
- Valuation of liability Meaning and Importance

Unit - IV

- Probability Meaning and nature, its use in insurance business
- Surrender of policy, surrender value, Lapse of policy, Reserve for Revival of Lapse Policy

Recommended books:

Fundamental Of Insurance, R.K. Gupta, Himalaya Publishing House.
Principles & Practice of Insurance, Dr. P. Periasamy, Himalaya Publishing House
Insurance Principle and Practice, M.M. Mishra and Dr. S.B. Mishra, S. Chand Publication



	Princ	iples o	of In	surance,	Dr.	Shakti Pr	atchbal	and	Dr. 1	V.P. Dw	ivedi,	Himalay	a Publishing
Ho	use												
199	5 65500	3350				0000	32	6.0	5 500	3-35V			

🗸 बीमा के सिध्दांत एवं व्यवहार — भगवती प्रकाळा अर्मा, राजीव जैन, पुरूशोत्तम दयाल— हिमालया प्रक्लिळांग हाऊस

VI - Semester 6T8.3-Advertising, Sales Promotion and Sales Management – III

Full Marks: 80 Time: 3 Hours

Internal Assessment: 20

Unit-I

- Sales Territories - Concept of Sales territory - Procedures for setting up Sales territories - Deciding assignment of sales personnel to territories.

Unit-II

Sales Budget and Sales Quota - Sales budget - Purpose, form and content of sales budgets, Sales Quota - Concept, Types of quota, Quota setting procedures, Administering the quota system.

Unit-III

- Consumer Promotions and Trade Promotions – Their purpose and types How to plan and evaluate a successful promotion, The relationship between advertising and promotions. Introduction to Global Marketing, Advertising and sales promotion.

Unit-IV

Laws for protection against Malpractices: Introduction, civil and penal codes Applicable to Advertising; laws relating to Intellectual Property Rights. Consume Protection Act 1986. Monopolies and restrictive trade practices Act 1969. Regulation Governing Broadcast Media Advertising.

Recommended books:

 Concepts and Case 	es, Manendra Mohan (Tata McGraw Hill) 🗆
☐ ☐ Sales Promotion and Advertising Manageme	ent (6thEd.)Himalaya Publishing House
□ Advertising Excellence by Bovee, Thill, Do	vel and Wood (McGraw Hill) □
•	
 Shelekar, Victor 	& Nirmala Prasad (Himalaya Publishing House)
	,
– Theory & Prac	etice –
•	
– S	

-16 for Sales Promotion) F.L. Lobo, Global



- Choudhry, Elliot & Too

SEMESTER VI QUESTION PAPER PATTERN FOR All Vocational Subjects

Computer Application, Insurance & Entrepreneurial Development &ASM

<u>T</u>	'IME:-	· 3 Hours]		[Full Marks:- 80
			N.B. – 1) All questions are compulsory. 2) All questions carry equal marks.	
			2) An questions carry equal marks.	
Q.1.				
	(a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.2.(a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.3.				
	(a)	UNIT – I		8Marks
	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.4(a)	UNIT	7 – I	8Mar	ks
- ' '	(b)	UNIT – I		8 Marks
			OR	
	(c)	UNIT – I		8 Marks
	(d)	UNIT – I		8 Marks
Q.5. A	nswer	in Brief		
	(a)	UNIT – I		4 Marks
	(b)	UNIT – II		4 Marks
	(c)	UNIT – III		4 Marks
	(d)	UNIT – IV		4 Marks





jk"Valar rqdMksth egkjkt ukxiwj fo|kihB] ukxiwj

^^ ¼IsaVay izksfOgUlsI 'kklu f'k{k.k foHkkxkph vf/klwpuk Øekad 513 fnukad 1 vkWxLV] 1923 }kjk LFkkfir o egkjk"Va fo|kihB vf/kfu;e] 1994 }kjk lapkfyr jkT; fo|kihB½***

1/4fo|k foHkkx1/2

N=irh f'kokth egkjkt iz'kkldh; ifjlj] jfoUnzukFk Vkxksj ekxZ] ukxiwj & 440 001nwj/ouh Øekad% dk;kZy;% 0712&2532063 QWDI % 0712&2555701

Ø- jkrqeukfo@fo|k@16@1170 03 IIVsacj] 2016

fnukad

vf/klwpuk

loZ laca/khrkaP;k ekfgrhdjhrk lqfpr dj.;kr ;srs dh] okf.kT; fo|k'kk[ksvarxZr ;s.kkjs ch-dkWe- inoh vH;kldze l= 2016&2017 iklqu l= i}frus ykxw dj.;kr ;srs vkgs- lnj vH;kldzekaP;k ifj{kk ;kstuk o vH;kldzehdsyk ek- dqyxq: egksn;kauh egkjk"Va fo|kihB vf/kfu;e 1994 P;k dye 141/471/2 varxZr fo}r ifjÔn vkf.k O;oLFkkiu ifjÔnsP;k orhus fnukad 02@09@2016 jksth ekU;rk iznku dsysyh vkgs- rlsp ek-dqyx:aauh lnj vH;kldzekyk l= i}rhus dk;kZUohr dj.;kdfjrk egkjk"Va fo|kihB vf/kfu;e 1994 P;k dye 141/481/2 varxZr ch-dkWe- vH;kldzekps funsZ'k dzekad 59 fnukad 02@09@2016 jksth fuxZfer dsyk vkgs-

ch-dkWe- inoh vH;kldzekaps funsZ'k] ifj{kk o vH;kldzehdk jk"V~lar rqdMksth egkjkt ukxiwj fo|kihB] ukxiwj-www.naguniversity.org ww;k ladsrLFkGkoj miyC/k dj.;kr vkysys vkgs-

d`lk;k laca/khrkuh ukasn ?;koh

ek-dqyxq:aP;k

vkns'kkUo;s

Lok{kjhl@&

1/4Jh- iqj.kpnz esJke1/2
dqylfpo
jk"Valar rqdMksth
egkjkt
ukxiwj folkihB

izfrfyih ekfgrh o iq<hy dk;ZokghlkBh vxzsfÔr:

1-layfXur egkfo|ky;kaps loZ izkpk;Z@lapkyd@foHkkx izeq[k

2- loZ lHkkln] fo'ksÔ dk;Z lferh]

3--ek- leUo;d] okf.kT; fo|kk'kk[kk]

4- ek-ijh{kk fu;a=d]

5 midgylfpo ¼igoZ ifj{kk] igokZRrj

6-Lkgk;d dqylfpo 1/4lk- lkjh{kk @ lk-

7-Lkgk;d dqylfpo ¼xksiuh;½

fo|kihB

8- Lkgk;d dqylfpo ¼O;ko;k;hd

9-vf/k{kd 1/4v/;kns'k foHkkx1/2

 $10-vf/k\{kd \frac{1}{4}fudky foHkkx\frac{1}{2}$

11- izHkkjh vf/kdkjh ¼izdk'ku

ifj{kk] e-fo-1/2

ifj{kk o pkSd'kh½

jk"Clar rqdMksth egkjkt ukxiwj

ijh{kk½

foHkkx½



12-ek-dqyxq:aps Loh; lgk;d] 13-ek- dqylfpokaps Loh; lgk;d] 14-Jherh fouk izdk'ks] ekfgrk'kkL=

Lok{kjhl@&

1/4MkW- vfuy
fgjs[ku1/2
midqylfpo 1/4fo|k1/2
jk"Valar rqdMksth
egkjkt
ukxiwj fo|kihB-





RASHTRASANT TUKDOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR

Directon No. 1 of 2017

DIRECTION GOVERNING THE EXAMINATION LEADING TO THE DEGREE OF Bachelor of Business Administration (BBA) (CREDIT BASE SEMISTER PATTERN) FACULTY OF COMMERCE

WHEREAS the Maharashtra Universities Act No. XXXV of 1994 has come into force with effect from 22nd July, 1994.

AND

WHEREAS the amendment to the said Act came to be effected from 12th May,2000.

AND

WHEREAS the Faculty of Commerce in its meeting held on 14.3.2016 have decided to restructure the syllabus for the award of the degree of **Bachelor of Business Administratoin (BBA)** Examination commensurate with the curricula existing in the various Universities in India and with a view to include the latest trends in the commerce stream as well as to design it to suit to the needs of the industries and corporate houses as provided under Section 38(a) of the Act.

AND

WHEREAS all the Board of Studies in Faculty of Commerce in its meeting held on 5.4.2016 restructured the existing syllabi and recommended the new scheme of examination.

AND

WHEREAS the recommendations made by the all four Board of studies under Faculty of Commerce were approved by the Academic Council, in its meeting held on 8.6.2016.

ANI

WHEREAS no ordinance is in existance prescribing THE EXAMINATION LEADING TO THE DEGREE OF Bachelor of Business Administration (BBA) (CREDIT BASE SEMISTER PATTERN).

WHEREAS the Special Task Committee in its meeting on 23-11-2016 decided to prepare a draft of new direction & syllabus of BBA (CBS).

WHEREAS the Special Task Committee in its meeting on 04-01-2016 considered & approved the draft of new direction and syllabus of BBA (CBS) submitted by the sub-committee & recommended it to the Hon'ble Vice-Chancellor for his approval.

AND

WHEREAS the matter involved is required to be implemented urgently for the purpose of prescribing examinations leading to the degree of **Bachelor of Business Administration (BBA) (CBS)** in the Faculty of Commerce.



WHEREAS the preparation of ordinance to regulate the matter relating to the examinations leading to the degree of Bachelor of Business Administration (BBA) (CBS) is time consuming process

AND

Now, therefore, I,Dr. SiddharthvinayakP. Kane, Vice-Chancellor, Rastrasant Tukdoji Maharaj Nagpur University, Nagpur in exercise of the powers vested in me under Section 14(8) of the Maharashtra University Act of 1994 do hereby issue the following direction.

Scheme of Examination

- 1. This direction may be called **'Examination leading to the Degree of Bachelor of Business Administration (BBA)**CREDIT BASE SEMISTER PATTERN) in the Faculty of Commerce (Amendment),---Number-------
- 2. This direction shall come into force with effect from the date of its approval by the Management Council & shall be applicable from academic session 2016-17.
- 3. There shall be Six Examinations leading to the degree of Bachelor of Business Administration (BBA)namely:
 - (1) The Bachelor of Business Adminstration (BBA) 1st Semester Examination,
 - (2) The Bachelor of Business Adminstration (BBA) 2nd Semester Examination,
 - (3) The Bachelor of Business Adminstration (BBA) 3rd Semester Examination,
 - (4) The Bachelor of Business Adminstration (BBA) 4th Semester Examination,
 - (5) The Bachelor of Business Adminstration (BBA) 5th Semester Examination and
 - (6) The **Bachelor of Business Adminstration (BBA)** 6th Semester Examination.
- 4. The duration of the Degree Course under this shall be of three academic years divided into six semesters with the BBA 1st and 2nd Semester Examinations during the first academic year, the BBA 3rd and 4th Semester Examinations during the second year and the BBA 5th and 6th Semester Examinations during the third year.
- 5. The Examinations Specified in paragraph 3 above shall be held twice a year at such places and on such dates as may be fixed by the University.
- 6. The details of eligibility for **BBA Sem I** examination:
- (A) For the **BBA 1**st **Semester**, Examinee shall have Passed the 12th Standard Examination of the Maharashtra State Board of Secondary and Higher Secondary Education, with English at Higher or Lower level and any Modern Indian Language at higher or lower level with any combination of optional subjects;

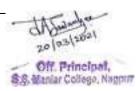
OR

XII Standard Examination of Maharashtra State Board of Secondary and Higher Secondary Education in Vocational Stream with one language only; OR any other examination recognized as equivalent thereto; in such subjects and with such standards of attainments as may be prescribed Minimum Competition vocation course (MCVC).

OR

Any other Equivalent Examination of any State in (10+2) pattern with any combination of subjects.

7. A collegiate candidate shall have pursued a regular course of study for not less than 90 days of the academic session before being examined for any semester examination of **BBA** in any recognized institution and or college affiliated to Rashtrasant Tukdoji Maharaj Nagpur University where the course is conducted.



- 8. An applicant for the Bachelor of Business Administration 1^{st} , 2^{nd} , 3^{rd} , 4^{th} , 5^{th} or 6^{th} Semester Examination shall have passed an examination specified in Clauses (A), (B), (C), (D), (E) and (F) of paragraph 6 respectively, not less than one academic year prior to his admission to the respective examination.
- 9. Without prejudice to the other provisions of Ordinance No. 6 relating to the Examinations in General, the provisions of Paragraphs 5, 7, 8, 10, 26 and 31 of the said Ordinance shall apply to every collegiate candidate.
- 10. The fees for the examination shall be as prescribed by the University from time to time and whenever any change is made in the fees prescribed for any particular examination that shall be notified through a notification for information of the examinees concerned.

11. With the issuance of this Direction, The Direction No 15 of 2014 and 47 of 2016 shall stand repealed.

Nagpur Dr. S. P. Kane
Date: 7.1.2017 Vice-Chancellor



12. Teaching and Examination Scheme for examinees of Bachelor of Business Administration 1st, 2nd, 3rd, 4th, 5th and 6th Semester Examinations shall be as mentioned below:

Teaching and Examination Scheme Bachelor of Business Administration (BBA)

Three Year Degree Course (Semester Pattern) With effect from 2016-17

(A)

BBA 1st Semester Examination

Sr. No.	Subjects	Course Code	Teaching Scheme	Exam	ninatio	n Schei	me	Total Marks	Credits
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Total Marks	Min. Passing Marks		
1	English	BB 1	5	80	20	100	40	100	4
2	Fundamentals of Business Management	BB 2	5	80	20	100	40	100	4
3	Computer Applications for Business	BB 3	5	80	20	100	40	100	4
4	Cost Accounting	BB 4	5	80	20	100	40	100	4
	Total		20	320	80	400	160	400	16

Note: 1. Duration of each theory class should be minimum 48 minutes.

- 2. TH = Theory, IM = Internal Marks.
- 3. Minimum marks for passing the subject will be 40.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.
- 6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

(B)

BBA 2nd Semester Examination

Sr. No.	Subjects	Course Code	Teaching Scheme	Exam	ination	Schem	ne	Total Marks	Credits
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Total Marks	Min. Passing Marks		
1	Principles of Marketing Management	BB 5	5	80	20	100	40	100	4
2	Financial & Management Accounting	BB 6	5	80	20	100	40	100	4
3	Micro-Economic Fundamentals	BB 7	5	80	20	100	40	100	4
4	English	BB 8	5	80	20	100	40	100	4
	Total		20	320	80	400	160	400	16



Note: 1. Duration of each theory class should be minimum 48 minutes.

- 2. TH = Theory, IM = Internal Marks.
- 3. Minimum marks for passing the subject will be 40.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.
- 6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

(C)

BBA 3rd Semester Examination

Sr.	Subjects	Course	Teaching	Exan	ninatio	on Sch	eme	Total	Credits
No.		Code	Scheme					Marks	
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Total Marks	Min. Passing Marks		
1	Principles of Financial	BB 9	5	80	20	100	40	100	4
	Management								
2	Basic Statistical Techniques	BB 10	5	80	20	100	40	100	4
3	Evolution of Business &	BB 11	5	80	20	100	40	100	4
	Commercial Geography								
4	Environment Management	BB 12	5	80	20	100	40	100	4
	Total		20	320	80	400	160	400	16

Note: 1. Duration of each theory class should be minimum 48 minutes.

- 2. TH = Theory, IM = Internal Marks.
- 3. Minimum marks for passing the subject will be 40.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.
- 6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

(D)

BBA 4th Semester Examination

Sr.	Subjects	Course	Teaching	Examination Scheme			ie	Total	Credits
No.		Code	Scheme					Marks	
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Total Marks	Min. Passing Marks		
1	Principles of Human Resource Management	BB 13	5	80	20	100	40	100	4
2	Money, Banking & Finance	BB 14	5	80	20	100	40	100	4
3	Introduction to Sociology & Psychology	BB 15	5	80	20	100	40	100	4
4	Business Legislations	BB 16	5	80	20	100	40	100	4
	Total		20	320	80	400	160	400	16

Note: 1. Duration of each theory class should be minimum 48 minutes.

2. TH = Theory, IM = Internal Marks.



- 3. Minimum marks for passing the subject will be 40.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.
- 6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

(E)

BBA 5th Semester Examination

Sr. No.	Subjects	Course Code	Teaching Scheme	Examination Scheme			Total Marks	Credits	
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Total Marks	Min. Passing Marks		
1	Entrepreneurship Development	BB 17	5	80	20	100	40	100	4
2	Principles of Operations Management	BB 18	5	80	20	100	40	100	4
3	International Business Environment	BB 19	5	80	20	100	40	100	4
4	Research Methodology	BB 20	5	80	20	100	40	100	4
	Total		20	320	80	400	160	400	16

Note: 1. Duration of each theory class should be minimum 48 minutes.

- 2. TH = Theory, IM = Internal Marks.
- 3. Minimum marks for passing the subject will be 40.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.
- 6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

(F)

BBA 6th Semester Examination

Sr.	Subjects	Course	Teaching	Exam	ination	Schem	ie	Total	Credits
No.		Code	Scheme					Marks	
			Total Periods per Week	Max. Marks(TH)	Max. Marks (IM)	Fotal Marks	Min. Passing Marks		
1	Elective Paper – 1	BBEL 1	5	80	20	100	40	100	4
2	Elective Paper – 2	BBEL 2	5	80	20	100	40	100	4
3	Project Work	BBPW	10	150	50	200	80	200	8
_	Total		20	310	90	400	160	400	16

Note: 1. Duration of each theory class should be minimum 48 minutes.

- 2. TH = Theory, IM = Internal Marks.
- 3. Minimum marks for passing the subject will be 40 and for Project Work it will be 80.
- 4. There would be combined passing for theory and internal assessment taken together.
- 5. One credit is equivalent to one hour of Teaching, that is to say, For each subject, 48 Minutes * 5 = 240 Minutes = 4 Hours i.e. 4 Credits.



6. Each semester will consist of 15 to 18 weeks of Academic Work equivalent to 90 actual teaching days.

Elective Subjects (Any one of the following to be selected by the student):

Every student appearing for BBA – 6th Semester Examination has to select any one of the specialization as elective subject before commencement of the academic session:

- a) Elective A Financial Management
 - a. Paper 1 Fundamentals of Business Finance
 - b. Paper 2 Advanced Financial Management
- b) Elective B Human Resource Management
 - a. Paper 1 Fundamentals of Human Resource Management
 - b. Paper 2 Advanced Human Resource Management
- c) Elective C Marketing Management
 - a. Paper 1 Fundamentals of Marketing Management
 - b. Paper 2 Advanced Marketing Management

12. Assessment

- The final total assessment of the candidates is made in terms of an internal assessment (Sessional) and an external assessment for each course/subject taken together.
- For each paper, 20 marks will be based on internal assessment and 80 marks for semester end examination (external assessment) to be conducted by the R T M Nagpur University, unless otherwise stated.

1a	Attendance of the student during a particular semester	05 marks			
1b	An assignment based on curriculum to be assessed by the teacher concerned	05 marks			
1c	Subject wise class test conducted by the teacher concerned	05 marks			
1d	Subject presentation/viva-voce seminar conducted during the semester	05 marks			
1	Internal assessment Total marks	20			
2	Semester wise End Examination marks	80			
	Total Marks Per Course				

- There shall be no separate / extra allotment of workload to the concerned teacher. He/ She shall conduct the internal assessment activity during the regular teaching days / periods as a part of regular teaching activity.
- The internal marks will be communicated to the University at the end of each semester, but before the semester end examinations / as instructed by University. These marks will be considered for the declaration of the results.
- The record of internal marks, evaluation & result should be maintained for a period of one year by respective institute/college for verification by competent authority.
- The maximum and minimum marks which each subject carries in BBA Semester I, Semester II, Semester IV, Semester V & Semester VI Examination are as indicated in Paragraph 11. A, B, C, D, E & F respectively.
- **13. (A)** The scope of the subjects and pattern of examination shall be as indicated in the Syllabus.
 - **(B)**The Medium of instructions and examinations shall be in ENGLISH only.
 - (C)The Maximum/minimum marks which each subject carries & workload in BBA 1st, 2nd, 3rd, 4th, 5th and 6th Semester Examination shall be as indicated in Examination & Teaching Scheme (item no 11) "A", "B", "C", "D", "E" and "F" respectively.

14. Evaluation of Project

- Project Work shall carry 200 marks
- Evaluation Pattern



	Max. Marks
Project Report Evaluation by External Examiner appointed by	100
the University	
Presentation and Open Defense Seminar (External Examiner)	50
Presentation and Open Defense Seminar (Internal Examiner)	50
Total	200

- (i) For Project worka batch of Maximum **TWENTY** students per guide /supervisor has to be allotted by the Institute. The Guide/Supervisor shall act as an internal examiner for project Examination.
- (ii) The guide or the supervisor shall be appointed by the institute and should be full time approved faculty to BBA / MBA Programme or PhD supervisor in Business Management.
- (iii) The External examiner shall be appointed from the list of full time approved teaching faculty of the BBA/ MBA program by the University.
- (iv) Each such External examiner shall examine a maximum of TWENTY students.
- (v) One copy of Project work (Printed or Type Written) shall be submitted to the University through the supervisor of the candidate and the Principal/ Director / Head of the Institute, at least **One Month** prior to the date of commencement of Semester-VI Examination **or** following the instructions issued by University at that time and one copy will be retained by the college/Department for internal evaluation purpose.
- (vi) A Candidate shall submit with his/her project work, a certificate from the Supervisor to the effect
 - a. That the candidate has satisfactorily completed the Project work for not less than one session and
 - b. That the Project work is the result of the candidates own work and is of sufficiently high standard to warrant its presentation for examination.
- (vii) Candidate shall submit his declaration that the Project is the result of his own research work and the same has not been previously submitted to any examination of this University or any other University. The Project shall be liable to be rejected and /or cancelled if found otherwise.
- (viii) The Project work shall be evaluated through seminar and open defense and Viva-voce at the College/ Department by internal and external examiners appointed by university **before Semester-VI** Examination.

A student appearing for BBA Semester VI Examination will have to pay additional fees as prescribed by the University from time to time.

15. Standard of Passing

The scope of the subject, percentage of passing in Theory and Project and Internal Assessment will be governed as per following rules:

- (i) In order to pass at the Bachelor of Business Administration (B.B.A.) 1^{st} , 2^{nd} , 3^{rd} , 4^{th} , 5^{th} and 6^{th} Semester Examinations, an examinee shall obtain not less than 40 % marks in each paper, that is to say combined in the written Examination conducted by the University and in internal assessment put together.
- (ii) An examinee who is unsuccessful at the examination shall be eligible for admission to the subsequent examinations on payment of a fresh fee prescribed for the examination together with the conditions of the ordinance in force from time to time.

16. Credit and Grade Point System:

Conversion of Marks to Grades and Calculations of SGPA (Grade Point Average) and CGPA (Cumulative Grade Point Average): In the Credit and Grade Point System, the assessment of individual Courses in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by some mechanism wherein the overall performance of the Learners can be reflected after considering the Credit Points for



any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

Abbreviations and Formulae Used

G: Grade

GP: Grade Points

C: Credits

CP: Credit Points

CG: Credits X Grades (Product of credits & Grades)

SGPA = \SigmaCG: Sum of Product of Credits & Grades points / Σ C: Sum of Credits points

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designated as GPA)

CGPA: Cumulative Grade Point Average shall be calculated for the entire Programme by considering all the semesters taken together.

After calculating the SGPA for an individual semester and the CGPA for entire programme, the value can be matched with the grade in the Grade Point table as per the ten (10) Points Grading System and expressed as a single designated GRADE such as O, A+, A, B+, B, etc.

Marks	Grade	Grade Points
80 and above	O (Outstanding)	10
70 –79	A+ (Excellent)	9
60 -69	A (Very Good)	8
55 –59	B+ (Good)	7
50 –54	B(Above Average)	6
45 –49	C (Average)	5
40 -44	P (Pass)	4
00 –39	F (Fail)	0
	AB (Absent)	0

A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

- (A) There shall be no classification of examinees successful at the Bachelor of Business Administration (BBA) Semester I, Semester II, Semester III, Semester IV, Semester V and Semester VI Examinations whereas SGPA will be notified.
- (B) Division at the Bachelor of Business Administration (BBA) Semester VI Examination shall be declared on the basis of the aggregate marks at the BBA Semester I, Semester II, Semester III, Semester IV, Semester V and Semester VI Examination taken together and the CGPA will be calculated and notified.



(C) Successful examinees at the Bachelor of Business Administration (BBA) Semester - VI Examination shall be awarded division based on CGPA as follows:

CGPA	Grade	Division
8.5 - 10	O	Distinction (Outstanding)
7.5 – 8.4	A	Distinction
6.0 - 7.4	В	First
4.5 – 5.9	С	Second
4.0 - 4.4	D	Pass
00 - 3.9	F (Fail)	Fail

- **17.** The percentage of passing marks in each subjects shall be as indicated in Examination Scheme (item no 11) "A", "B", "C", "D", "E" and "F" respectively.
- **18.** Unsuccessful examinees at the above examinations can be readmitted to the same examination on payment of a fresh fee and such other fees as may be prescribed.
- **19.** Provisions of Ordinance No. 3 of 2007 relating to the award of Grace Marks for passing an examination, securing higher division / class and for securing distinction in subject(s) shall be applicable.
- **20.** Notwithstanding anything to the contrary in this Direction, no person shall be admitted to an examination under this Ordinance, if he/ she has already passed the same examination or an equivalent examination of any other University.
- **21.** Examinees passing all the **Bachelor of Businesss Adminsitration (BBA)**Examination shall on payment of the prescribed fees shall receive a Degree in the prescribed form signed by the Vice-Chancellor.
- **22.** The aforesaid Amendment shall come into force from the date of its issuance and shall remain in force till the relevant Ordinance come into being in accordance with the provisions of the Maharashtra University Act, 1994.
- **23.** The marks for internal assessment should be communicated to University within time limit as per University norms. The record of conduct of such examination, evaluation and marks for internal assessment should be maintained for a period of at least **one** year by the respective college / Department for the verification by the competent authority.
- **24. Promotion to Higher Semester (A.T.K.T.):** The unsuccessful candidate of any semester examination shall be ALLOWED TO KEEP THE TERM (ATKT) in accordance with the following table: (Theory and Internal assessment of that theory subject shall be jointly considered as single passing head).

Admission to	Candidate should	Candidate should have filled	Candidate should
academic year	have passed All	the examination form for the	have passed in
•	Subjects of the	following examinations	Minimum 50%
	following examination		passing heads of the
			following
			examination



1st Semester	H.S.S.C/equivalent		
2 nd Semester		1st Semester	
3 rd Semester		2 nd Semester	4 subjects/ passing heads of 1 st and 2 nd Semesters taken together
4 th Semester		3 rd Semester	
5 th Semester	1st and 2nd Semesters	4 th Semester	4 subjects/ passing heads of 3 rd and 4 th Semesters taken together
6 th Semester*		5 th Semester	

Note: (*) A candidate admitted to Final Semester can appear for Final Semester examination however the result of the Final Semester examination will be withheld unless the candidate clears all the lower examinations of the **BBA Course**.

25. Pattern of Question Papers of BBA year end Examination:

- a. The question paper should be set in such a manner so as to cover the complete syllabus as prescribed by the University.
- b. The Semester End examination shall be held as per the schedule notified by the University.
- c. The question paper shall be of 80 marks & the time duration of the Semester End examination would be 3 hours.
- d. The question paper shall have 4 long answers questions corresponding to Four Units of each course. Each long answer question shall carry 8 marks. There will be internal choice for each question for these long answer questions which means that the student has to mandatorily attempt one question from each unit of the syllabus. Hence, there would be 8 long answer questions in the question paper but the student has to attempt 4 questions with an internal choice for each question from each unit of the syllabus. The students shall get due credit for precise answers as per Marking Scheme given by the paper setters/ moderators.
- e. Question no. Five shall include Four compulsory questions from any of the six units carrying 4 marks each.
- f. The paper setters /moderators shall submit the proposed marking scheme (Memorandum of Instructions) along with question paper so that the students can be given due credit for precise answers.

Illustrative Question Paper for BBA Program*

Question No.	Unit	Nature	Max. Marks
1	I	a. Long Answer Question	8 Marks each
		b. Long Answer Question	
		OR	
		 c. Long Answer Question 	
		d. Long Answer Question	
2	II	a. Long Answer Question	8 Marks each
		b. Long Answer Question	
		OR	
		 c. Long Answer Question 	
		d. Long Answer Question	
3	III	a. Long Answer Question	8 Marks each
		b. Long Answer Question	
		OR	
		c. Long Answer Question	
		d. Long Answer Question	



4	IV	a.	Long Answer Question	8 Marks each
		b.	Long Answer Question	
			OR	
		c.	Long Answer Question	
		d.	Long Answer Question	
5	I	a.	Short Answer Question	4 Marks each
	II	b.	Short Answer Question	
	III	c.	Short Answer Question	
	IV	d.	Short Answer Question	
	80			

- (*) This pattern of question paper is not applicable for the following papers for which the question paper patterns are prescribed separately along with the detailed syllabus of respective subjects.
 - BBA 1st Semester Examination Cost Accounting
 - BBA 1st Semester Examination English
 - BBA 2nd Semester Examination English
 - BBA 2nd Semester Examination Financial & Management Accounting
 - BBA 3rd Semester Examination Basic Statistical Techniques

•

26. Absorption Scheme for Examinees of BBA Old Course (Introduced in 2014):

1. The students of the BBA Course (Introduced in 2014) immediately preceding the new course under this direction shall be given chance to appear for three more consecutive examinations according to old syllabus (Introduced in 2014). The University shall conduct the examination of old course for three more consecutive examinations after the new scheme of examination is introduced as per following table:

BBA Examination	Attempt 1	Attempt 2	Attempt 3
BBA Part I	Winter 2016	Summer 2017	Winter 2017
BBA Part II	Winter 2017	Summer 2018	Winter 2018
BBA Part III	Winter 2018	Summer 2019	Winter 2019

The students are required to clear all their papers within the stipulated time. The students clearing all the papers of old scheme of Examination (Introduced in 2014) shall be awarded Degree according to old scheme of Examination. But, the students who failed to clear their course in three consecutive attempts as per this clause, will be required to appear afresh for BBA (CBS) examination provided under this direction.

2. The absorption of students of old course (Introduced in 2014) referred above shall be made to the new course in the following manner:

Status of Student in Old	Absorption Scheme
Course	_
A student who has failed in	Shall be required to appear a fresh in BBA 1st and 2nd
one or more subjects of BBA	Semester Examination of this direction and shall be eligible
Part I examination of old	for the exemptions in the subjects he/she had passed in old
course (Introduced in 2014).	course subject to the equivalence mentioned hereinafter.
A student who has failed in	Shall be required to appear a fresh in BBA 3rd and 4th
one or more subjects of BBA	Semester Examination of this direction and shall be eligible
Part II examination of old	for the exemptions in the subjects he/she had passed in old
course (Introduced in 2014).	course subject to the equivalence mentioned hereinafter.
·	
A student who has failed in	Shall be required to appear a fresh in BBA 5th and 6th



one or more subjects of BBA Part III examination of old course (Introduced in 2014).

Semester Examination of this direction and shall be eligible for the exemptions in the subjects he/she had passed in old course subject to the equivalence mentioned hereinafter.

3. The equivalence & exemption of subjects for the students absorbed in the new course shall be as follows:

BBA New Course Examination (Semester Pattern)	Name of Subject in New Course Examination (Semester Pattern)	BBA Old Course Examination (2014)	Equivalent Subject in Old Course	Status of Exemption
,	English	BBA Part I	English & Business Communication	Yes
Semester I	Fundamentals of Business Management	BBA Part I	Principles of Management	Yes
Semester 1	Computer Applications for Business	BBA Part I	Computer Applications for Business	Yes
	Cost Accounting	BBA Part I	Financial & Cost Accounting	Yes
	Principles of Marketing Management	BBA Part II	Principles of Marketing Management	Yes
Semester II	Financial & Management Accounting	BBA Part I	Financial & Cost Accounting	Yes
Semester II	Micro-Economic Fundamentals	BBA Part I	Business Economics	Yes
	English	BBA Part I	English & Business Communication	Yes
	Principles of Financial Management	BBA Part II	Management Accounting & Financial Management	Yes
Semester III	Basic Statistical Techniques	BBA Part II	Statistical Methods for Business	Yes
	Evolution of Business & Commercial Geography			No*
	Environment Management	BBA Part II	Environment Management	Yes
	Principles of Human Resource Management	BBA Part II	Human Resource Management	Yes
Semester IV	Money, Banking & Finance Introduction to Sociology & Psychology	BBA Part I	Business Economics	Yes No*
	Business Legislations	BBA Part II	Business & Industrial Laws	Yes
	Entrepreneurship Development	BBA Part III	Entrepreneurship Development	Yes
Semester V	Principles of Operations Management	BBA Part III	Production & Operations Management	Yes
	International Business Environment			No*
	Research Methodology	BBA Part II	Research Methodology	Yes
	Financial Management – Paper 1	BBA Part III	Financial Management - Paper 1	Yes
Semester VI	Financial Management – Paper 2	BBA Part III	Financial Management - Paper 2	Yes
	Human Resource	BBA Part III	Human Resource	Yes



Management - Paper 1		Management - Paper 1	
Human Resource	BBA Part III	Human Resource	Yes
Management - Paper 2		Management - Paper 2	
Marketing Management -	BBA Part III	Marketing	Yes
Paper 1		Management -Paper 1	
Marketing Management -	BBA Part III	Marketing	Yes
Paper 2		Management -Paper 2	

- (*) All these subjects have no equivalent subjects in the BBA Old Course Examination (introduced in 2014). Hence, students desiring for absorption in New Course under this Direction are mandatorily required to appear for these subjects in respective semesters.
- 4. The University examination & Internal examination marks awarded in the equivalent subjects of the BBA old course shall be carried in the mark sheet of the BBA new semester scheme of examination.
- 5. As stated above, a student failing in one or more subjects & could not pass it in three attempts of any year exam of old annual pattern syllabus (2014), is required to appear a fresh in the corresponding semester exam subject to exemptions as mentioned above. The final Mark lists of such students are to be prepared on the basis of semester pattern by presenting the marks against equivalent papers.
- 6. If a student who had opted for final year 'Service Sector Management' specialization papers of old syllabus (2014) & could not pass it in three attempts, he shall appear for a new specialization subject as per semester pattern scheme.
- 7. The above absorption scheme of B.B.A. shall be effective till the introduction of new Syllabus.

27. Guidelines for Project Work:

Objective

Every student will be assigned a project in 6th Semester of BBA and it will be pursued by him/her under the supervision of an internal supervisor. The objective of the Project Work is to help the student develop his/her ability to apply multi-disciplinary concepts, tools and techniques to solve organizational problems and/or to evolve new/innovative theoretical frame work.

Type of Project

The Project may take any one of the following forms:

- i) Comprehensive case study (covering single organization/multifunctional area problem, formulation, analysis and recommendations)
- ii) Inter-organizational study aimed at inter-organizational comparison/ validation of theory/survey of management services.
- iii) Evolution of any new conceptual / theoretical framework.
- iv) Field study (Empirical study).
- v) Software analysis, Design and solutions for organizational achievement (Applicable to IT)

Selection of Project Topic:

- Project topic has to be selected with respect to the programme of study and area elected by the student.
- Title of the project should clearly specify the objective and scope of the study. It should be specific and neither too vague nor centralistic. The topics should be designed meticulously. It can be designed like "Employee Welfare Measures" A case study of XYZ Ltd.
- Project selection has to be made in consultation with the supervisor who will act as a Project guide for the student.

Scope of Work

The student is expected to carry out following activities in the project:



- 1. Prepare a synopsis and get it approved by the supervisor as assigned by the respective Institutes.
- 2. Undertake a detailed literature survey on the subject matter.
- 3. Make relevant data collection/observation.
- 4. Consult experts of the field.
- 5. Visit related organizations/institutions/industries.
- 6. Compile data in proper format.
- 7. Make proper conclusion/recommendations.
- 8. Prepare a Project Report.
- 9. The volume of the project-report should be ranging from 60-80 pages.
- 10. Obtain approval of Project Report by project supervisor.
- 11. Submit two hard bound copies of the Project Report at the Institute.
- 12. Submission of the Project Report shall be one month prior to the date of the commencement of the 6th Semester Examinations for BBA.

General Format of the Report

The project report should preferably be written in the following format:

- a) Executive Summary
- b) Introduction to topic
- c) Research Methodology
- d) Analysis and Findings of the study
- e) Conclusions and Recommendations of the study
- f) Bibliography
- g) Appendices to include questionnaire, if any

Examination and Evaluation

The Project is to be treated as a paper of study of the BBA-6th Semester comprising of 200 marks. The external assessment shall be done on the basis of the project report and Viva Voce. The Project shall be evaluated by an External faculty for 150 marks and of which 100 marks will be allocated to the Written Report Content and Presentation and 50 marks for Viva Voce. The Project work shall be evaluated by internal and external examiners for 100 marks (as mentioned above) at the respective institute / college as per the scheduled fixed by the university. One such External Examiner shall not examine more than 20 students in one academic year.

28. This direction shall come into force phase wise from the academic session 2016-17.

Appendix A

Subject/Paper Summary for BBA Program

Semester	Subject Code	Name of Subject	
	BB1	English	
I	BB2	Fundamentals of Business Management	
_	BB3	Computer Applications for Business	
BB4 Cost Account		Cost Accounting	
	BB5	Principles of Marketing Management	
II	BB6	Financial & Management Accounting	
	BB7	Micro-Economic Fundamentals	
	BB8	English	
III	BB9	Principles of Financial Management	



	BB10	Basic Statistical Techniques
	BB11	Evolution of Business & Commercial Geography
	BB12	Environment Management
BB13 Principles		Principles of Human Resource Management
IV	BB14	Money, Banking & Finance
14	BB15	Introduction to Sociology & Psychology
	BB16	Business Legislations
	BB17	Entrepreneurship Development
BB18 Principles of Operations Manage		Principles of Operations Management
ľ	BB19	International Business Environment
	BB20	Research Methodology
	BBEL1	Elective - Paper 1
VI	BBEL2	Elective - Paper 2
	BBPW	Project Work

Appendix B

List of Elective Subjects

Group Area	Paper	Name of Subject
Financial Management	1	Fundamentals of Business Finance
- maneiar waringement	2	Advanced Financial Management
Human Resource Management	1	Fundamentals of Human Resource Management
Truman Resource Management	2	Advanced Human Resource Management
Marketing Management	1	Fundamentals of Marketing Management
	2	Advanced Marketing Management



Appendix C

Detailed Syllabus

Bachelor of Business Administration (BBA) Examination

Semester - I

BB 1 - English

Unit I: Basic Grammar – Tense, Forms of the Verb, Preposition, Articles, Punctuation, Single Word for a Group of Words, Sentence Construction, Comprehension.

Unit II: Business Letter Writing- Enquiries and replies, Placing and fulfilling orders, Complaints and follow-up letters, Sales letters, Circular letters, Application for employment and Resume.

Unit III: Business Manners- Body Language, Gestures, Telephone etiquette, E-mail etiquette. Textbook:

- 1) The Bet Anton Chekov
- 2) Socrates and the Schoolmaster F. L. Brayne

Unit IV: Textbook:

- 1) An Astrologer's Day R. K. Narayan
- 2) The Gift of the Magi O' Henry
- 3) With the Photographer Stephen Leacock

Reference Books:

- 1. Textbook entitled 'Prism: Spoken and Written Communication, Prose & Poetry' published by Orient Longman
- 2. Orient Longman, Raj N Bakshi 2003-2007.
- 3. The grammar Tree, MridulaKaul, BeenaSugathan, ArchanaGilani- Oxford university press 2011
- 4. Grammar for All, N Ramlingam, Himalaya Publishing House, 2nd Edition 2014.
- 5. John Eastwood, Oxford Practice Grammar with answers
- 6. High School English Grammar & Composition, Wren & Martin Revised by NDV Prasad Rao, S Chand Publication
- 7. Business Correspondence & Report Writing, R C Sharma &Krisha Mohan, 3rd Edition, Tata Mcgrall Hill
- 8. Communication, CS Rayudu, Himalaya Publication July 2008
- 9. Business Communication, UrmilaRai, S M Rai, Himalaya Publication 9th Edition.

BB 1- ENGLISH

QUESTION PAPER PATTERN

[Maximum Marks – 80

(A) Comprehension of Unseen Passage (UNIT-I)
 (Four Very Short Answer Questions based on the given Passage)
 4 X 2 Marks= 8 Marks



(B) Four items out of Six based on any one of the Grammar/Vocabulary items prescribed in **UNIT-I**

4 X 1 Mark = 4 Marks

(C) Four items out of Six based on any one of the Grammar/Vocabulary items prescribed in **UNIT-I**

4 X 1 Mark = 4 Marks

2. (A) ONE out of TWO Questions from **UNIT-II** (Business Letter Writing)

1 X 8 Marks = 8 Marks

(B)ONE out of TWO Questions from **UNIT-II** (Business Letter Writing)

1 X 8 Marks = 8 Marks

- 3. (A) ONE out of TWO Questions from **UNIT-III** (Business Manners) 1 X 8 Marks = 8 Marks
 - (B) ONE out of TWO Long Answer Questions (to be answered in about 150 words) based on the prescribed Lessons in **UNIT-III** from the textbook **Prism**
 - 1 X 8 Marks = 8 Marks
- 4. (A) TWO Short Answer Questions (to be answered in about 75 words) out of THREE based on the Lessons Prescribed in **UNIT-III**

2 X 4 Marks = 8 Marks

(B) ONE out of TWO Long Answer Questions (to be answered in about 150 words) based on the prescribed Lessons in **UNIT-IV** from the textbook **Prism**

1 X 8 Marks = 8 Marks

5. (A) TWO Short Answer Questions (to be answered in about 75 words) out of THREE based on the prescribed Lessons in **UNIT-IV** from the textbook **Prism**

2 X 4 Marks = 8 Marks

(B) FOUR **Very Short Answer Questions** out of SIX to be answered in one or two sentences each from the prescribed Lessons (from **Prism**) in **UNIT-III&UNIT-IV**

4 X 2 Marks = 8 Marks

BB 2 - Fundamentals of Business Management

Unit I: Introduction -Nature, function, definition and importance of management, Definition, nature, purpose and scope of management, Functions of a manager, is management a science or art? Development of Management Thought -Scientific management; Contribution of Taylor, Fayol, Mary Follet, Elton Mayo; Hawthorne experiments, Contingency approach.

Unit II: Management and Administration-Management and administration, Management as a profession, Professionalism of management in India, Management ethics and management culture, Skills required of manager, Classification of skills, Methods of skills development.



Unit III: Management Planning-Concept of planning, objectives, Nature, Types of plan, Stages involved in planning, Characteristics of a good plan, Importance, Limitations of planning, Making planning effective, Strategic planning in Indian Industry.

Unit VI: Decision Making-Concept, characteristics of decisions, Types of decisions, Steps Involved in decision making, Importance of decision making, Methods of decision making, Committee Decision Making. Organisation -Concepts, Principle of organization, Importance, Features of good organization structure, Types of Organisation structure.

Reference Books:

- 1. Essential of Business Administration K.Aswathapa Himalaya Publishing House
- 2. Management: Concept and Strategies By J. S. Chandan, Vikas Publishing
- 3. Principles of Management, By Tripathi, Reddy Tata McGraw Hill
- 4. Principles of Management By Ramasamy T, Himalaya Publishing House
- 5. Principles of Management, Dr.NeeruVashisht&Dr.Namita Rajput, Taxmann

BB 3 - Computer Applications for Business

Unit I: Introduction to Computers - Generation of Computers, Block Diagram, Working of Computer, Hardware and Software, Programming and Flow Charts concepts, Operating systems (MSDOS, Windows, UNIX, Linux), Networking concepts.

Unit II: Working with Computers - Introduction to Word, Excel, PowerPoint, Internet,. Lab Activity would be based on the following topics: a. MS Word b. MS Excel c. MS PowerPoint

Unit III: Introduction to e-Commerce, e-Learning and e-Business, M-Commerce. Introduction to Basic Web Page designing Language (HTML), using Tags: - Structural, Formatting, List tags and Table.

Unit IV: IT Consulting – Basic concepts of business, strategy and operation; Business / Strategic Consulting: Reengineering, BPR; Operations Consulting: domain knowledge concept, domain-consulting. IT Enabled Services (ITES) – Processes, Outsourcing Function, Call Centres; BPO's: Captive BPO's (GE and Dell) and Third Party BPO's (Infosys BPO, Wipro BOP, Mphasis, Daksh and EXL etc).

Reference Books:

- 1. E-Commerce-ParagDewan (Excel Books),
- 2. P.K.Sinha -Computer Fundamentals.
- 3. World Wide Web -design with HTML -C Xavier,
- 4. Computer Application in Management -NirupmaPathak,
- 5. BPO-SarikaKulkarni,
- 6. BPO' Processes & Challenges By Harsh Bharghav& Deepak Kumar,
- 7. IT Enabled Retailing by k. Suresh,
- 8. IT Strategies for Business- FarhaKulkarni
- 9. Computer Applications in Management- UshaDahiya&SapnaNagpala, Taxmann

BB 4 - Cost Accounting

Unit -I: Introduction -Meaning of Cost, Costing and Cost Accounting, Features, Scope and Functions of Cost Accounting, Advantages and Limitations of Cost Accounting; Concept of Cost; Analysis and



Classification of Costs; Elements of Cost; Preparation of Cost Sheet (Statement of Cost); Quotations and tender. Introduction and need for reconciliation between financial accounts and cost account, reasons for disagreement in Profit; Preparation of Reconciliation Statement.

Unit -II: Process Costing: Meaning, features and applicability, difference between process and job costing, wastage and by-products, normal and abnormal loss. Preparation of process accounts

Unit III: Operating Costing: Classification of costs, Features of operating costing: Transport costing (Standard charge, running and operating cost, maintenance charges and log sheet)

Unit IV Marginal Costing: Introduction, Application of Marginal costing in terms of cost control, level of activity planning- Break-even-analysis: Application of BEP for various business problems.

Simple Numerical will be based on Unit II, III and IV

Reference Books:

- 1) Management Accounting, Bhagwati&Pillai, Second Edition, S. Chand &. Company ltd.
- 2) Cost & Management Accounting, Ravi M Kishore, Taxmann Publications Pvt. Ltd.
- 3) Cost and Management Accounting V. K. Saxena& C. D. Vashist, Sultan Chand & Sons Publication.
- 4) Cost Accounting, Text and Problems, MC Shuka, TS Grewal and MP Gupta, S Chand Publications

Question Paper Pattern for BB4 - Cost Accounting

	ii i uper i utterii i	or bb1 cost riccounting	
Question No.	Unit	Nature	Max. Marks
1	I	a. Theory Question	8 Marks
		b. Theory Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
2	II	 a. Numerical Question 	8 Marks
		b. Numerical Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
3	III	 a. Numerical Question 	8 Marks
		b. Numerical Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
4	IV	 a. Numerical Question 	8 Marks
		 b. Numerical Question 	8 Marks
		OR	
		 c. Numerical Question 	16 Marks
5	I	Short Answer Theory Question	4 Marks each
	II	Short Answer Theory Question	
	III	Short Answer Theory Question	
	IV	Short Answer Theory Question	
	TOTAL N	MARKS	80

Bachelor of Business Administration (BBA) Examination

Semester - II

BB 5 - Principles of Marketing Management

Unit I Marketing :Definition, nature, scope & importance, Marketing Management, Core concepts of marketing, selling concept, production concept, modern marketing concept.

Unit II Segmentation: Concept, basis of segmentation, Importance in marketing; Targeting: Concept Types, Importance; Positioning: Concept, Importance, Brand positioning, Repositioning.



Unit III Marketing Mix: Product : Product Mix, New Product development, levels of product, types of product, Product life cycle, Branding and packaging, different types of distribution channels.

Unit IV Price: Meaning, objective, factors influencing pricing, methods of pricing. Promotion: Promotional mix, tools, objectives, media selection & management. Process & Scope Marketing **Information Systems:** Meaning Importance and Scope Consumer Behaviour: Concept, Importance and Factors influencing consumer behaviour.

Reference Books:

- 1. Marketing Mgt. by Philip Kotler (PHI)
- 2. Marketing Management by RajanSaxena
- 3. Marketing Management by Namaswamy&Ramakumari.

BB 6 - Financial & Management Accounting

Unit -I: Introduction - Meaning, Scope and importance of Financial Accounting. Financial Accounting - concepts and conventions, classification of accounts, Rules and principles governing Double Entry Book-keeping system (Preparation of Journal), Nature and function of financial Reporting, GAAP.

Unit -II: Final Accounts of Companies - Final Accounts of Joint Stock Companies - contents and preparation of Trading and Profit and Loss Account, Profit and Loss Appropriation Account and Balance sheet with adjustment, Closing Entries (Simple entries)

Unit III: Management Accounting - Meaning, Scope, Importance, and Limitations of Management Accounting, Difference between Financial Accounting and Management Accounting, Break even analysis, Analysis of Financial Statements (using ratio analysis-simple ratios)

Unit IV: Budgetary Control - Business budgets and budgetary control - Types of budget and its utility, preparation of cash & flexible budgets.

Note: Simple Numericals will be based on all Units.

Reference Books:

- 1. S. N Maheshwari : Financial Accounting Theory and problems S.Chand (G/L) & Company Ltd.
- 2. Pillai R. S. N. Management Accounting S. Chand & Co. Pvt. Ltd.
- 3. Shukla and Grewal: Advanced Accounts (S. Chand & Ltd. New Delhi)
- 4. Management Accounting & Financial Management :- Arora M N (Himalaya Publishing
- 5. House Pvt. Ltd.)
- 6. Accounting for Management- Dr. Ashok Sehgal & Dr. Deepak Sehgal, Taxmann

Illustrative Question Paper Pattern for BB6 - Financial & Management Accounting

Question No.	Unit	Nature	Max. Marks
1	I	a. Theory Question	8 Marks
		b. Theory Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
2	II	a. Numerical Question	8 Marks
		b. Numerical Question	8 Marks
		OR	
		 c. Numerical Question 	16 Marks



3	III	a. Numerical Question	8 Marks
		b. Numerical Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
4	IV	a. Numerical Question	8 Marks
		b. Numerical Question	8 Marks
		OR	
		c. Numerical Question	16 Marks
5	I	Short Answer Theory Question	4 Marks each
	II	Short Answer Theory Question	
	III	Short Answer Theory Question	
	IV	Short Answer Theory Question	
	TOTAL N	MARKS	80

BB 7 - Micro-Economic Fundamentals

Unit I: Introduction to Micro Economics- Meaning, Definition, Importance of Micro Economics, Factors affecting Micro Economics. Difference between Micro-Economics & Macro Economics.

Unit-II Demand and Supply Analysis - Concept of Demand, Law of Demand-Meaning, Definition, Assumptions & Exceptions. Elasticity of Demand- Meaning, Types and Factors affecting Elasticity of Demand; The Indifference Curve Theory; Supply- Concept of Supply, Elasticity of Supply, Types and Factors affecting Elasticity of Supply.

Unit III: Production & Cost Analysis - Production & Production Function: Concept, Forms of Production function, Law of Variable Proportions, Returns to scale. Cost Concepts, Short term and Long term cost output relationship, The Isocost and Isoquant Approach, Economic Region and Economies & Diseconomies of scale.

Unit IV: Market Structures- Characteristics and price determination in various market structures - Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly. Pricing: Meaning, Types of Pricing.

Reference Books:

- 1. AgarwalaS.K., Microeconomic Theory, Excel Books, New Delhi
- 2. Appannaiah, Reddy &Shanthi, BBM Semester Economics, 2006, Himalaya Publishing House, Mumbai.
- 3. Dholkia R H &Oza A.N., 1996, Oxford University Press, New Delhi
- 4. Dominick Salvatore, Managerial economics in a Global economy, 2006, Thomson learning Press
- 5. Jhingan, 2004, M.L., Microeconomic Theory, Veranda Publishers, New Delhi.
- 6. Ravindra R Dholakia, Ajay N Oza, Micro –Economics for Management Studies, Oxford University Press, Delhi
- 7. Robert S.Pindyck, Daniel L Rubinfeld, PremL.Mehta, Microeconomics, 2006, Pearson, New Delhi.
- 8. Suma Damodran, Managerial Economics, 2006, Oxford University Press, New Delhi
- 9. Sundharam K P. M, microeconomics, Sultan Chand & Sons.



BB 8 - ENGLISH

(To be implemented from the Session 2016-2017 onwards)

1	Unit I	Basic Grammar& Vocabulary:	Reference Books:
		Subject-Verb- Agreement / Concord of Nouns, Pronouns and Possessive	Macmillan Foundation English by R. K. Dwivedi and A. Kumar (Macmillan/Trinity)
		Adjectives	2. Learners' English Grammar and Composition by N. D. V. Prasad Rao (S.Chand Publication)
		 Spotting errors and rewriting sentences 	
		correctly.Phrasal Verbs,Collocations and	3. Developing Communication Skills by Krishna Mohan and MeeraBanerji (Trinity)
		Idioms (based on the exercises at the end of the prescribed lessons from Golden Harvest	
		Words Often Confused	
2	UNIT II	Business Communication	Developing Communication Skills by Krishna Mohan and MeeraBanerji (Trinity)
		Writing Advertisements for: Rent, Sale, Situations Vacant	2. Write Right by SaritaManuja (Macmillan/Trinity)
3	UNIT III	Prose Items: • A Real Good Smile: Bill Naughton • What India Inc Wants: a. Our Muddled Generation: Dinesh Kumar	Prescribed text : Golden Harvest by Orient BlackSwan
		b. Employers Look for Potential Employees, not	



		Exam Results: Manish Sabharwal The Thief: Ruskin Bond	
4	UNIT IV	Prose Items: A Simple Philosophy: Seathl Go, Kiss the World: SubrotoBagchi My Struggle for an Education: Booker T. Washington	Prescribed text : Golden Harvest by Orient BlackSwan

BB 8 - ENGLISH

(QUESTION PAPER PATTERN)

[Maximum Marks – 80]

- 1. (A) FIVE items out of SEVEN based on Subject-Verb- Agreement/Concord (fill in the blanks)- **UNIT-I** 5 x 1 Mark = 5 Marks
 - (B) FIVE items out of SEVEN based on Spotting Errors and Rewriting Sentences correctly. **UNIT-I** 5 x 1 Mark = 5 Marks
 - (C) FIVE items out of SEVEN based on Phrasal Verbs/Collocations/Idioms UNIT-I 5 x 1 Mark = 5 Marks
 - (D) FIVE items out of SEVEN based on Words Often Confused (fill in the blanks) UNIT- I 5 x 1 Mark = 5 Marks
- 2. (A) ONE out of TWO items on Memorandum Writing UNIT-II 1 X 5 Marks = 5 Marks
 - (B) ONE out of TWO questions based on Notice, Agenda and Minutes UNIT-II 1 X 10 Marks = 10 Marks
 - (C) ONE out of TWO questions based on Writing Advertisements-UNIT-II 1 X 5 Marks = 5 Marks
- 3. (A) ONE out of TWO Long Answer Questions to be answered in about 150 words **UNIT-III** (Prescribed Text) 1 X 10Marks = 10 Marks
 - (B) TWO out of THREE Short Answer Questions to be answered in about 75 words **UNIT-III** (Prescribed Text) 2 X 5 Marks = 10 Marks



- 4. (A) ONE out of TWO Long Answer Questions to be answered in about 150 words **UNIT-IV** (Prescribed Text) 1 X 10 Marks = 10 Marks
 - (B) TWO out of THREE Short Answer Questions to be answered in about 75 words **UNIT-IV** (Prescribed Text) 2 X 5 Marks = 10 Marks

Bachelor of Business Administration (BBA) Examination

Semester - III

BB 9 - Principles of Financial Management

Unit -I: Introduction of Business Finance - Meaning, Scope and importance of Business Finance. Finance Functions. Goals & objectives of financial management

Unit -II: Sources of Financing - LONG TERM: Equity shares, Preference Shares, debentures,/ Bonds (Types, features & utility), term loans, lease & hire purchase, retained earnings,; SHORT TERM: trade credit, bank finance, commercial paper, factoring & bills discounting.

Unit III: Cost of Capital - Cost of capital, Cost of different sources of finance, weighted average cost of capital, Concept of Leverage, Concepts of Capital Structure.

Unit IV: Working Capital Management - Meaning, Scope, Importance, and Limitations of Working Capital, Factors affecting Working Capital needs, Various Approaches for financing Working Capital. Concept of Operating Cycle, Estimation of Working Capital Requirement

Note: Simple Numerical will be based on Unit III and IV only.

Reference Books:

- 1) Financial Management by Ravi Kishore, Taxmann Publications Pvt Ltd
- 2) Financial Management I M Pandey S. Chand & Co. Pvt. Ltd. (Old editions in Vikas Publications)
- 3) Financial Management , Theory, Concepts and Problems by Dr. R. P. Rustagi, Taxmann Publications Pvt Ltd
- 4) Financial Management, Text, Problems and Cases, by M Y Khan and P K Jain, McGraw-Hill Publications

BBA Sem III BB 10 - Basic Statistical Techniques

Unit I – Definition, functions, scope and role of statistics in business and importance of statistics. Classification of data, tabulation, frequency distribution, diagrams & graphs.

Unit II - Importance and requisites of a good statistical average, types of averages - arithmetic mean, median, mode, geometric mean, harmonic mean, weighted average, relationship amongst different averages.

Unit III – Meaning and significance of dispersion, methods of measuring dispersion – range, quartile deviation, mean deviation, standard deviation and coefficient of skewness.



Unit IV – Definition of correlation, significance of correlation, types of correlation, merits and limitations of coefficient, Calculation of coefficient of correlation and probable error for simple series, calculation of coefficient of correlation and probable error for continuous series.

Numerical shall be based on Unit II, Unit III, and Unit IV

Reference Books:

- 1. Fundamentals of statistics: D. V. Elhance&VeenaElhance
- 2. Statistices: V. K. Kapoor S. Chand & Sons
- 3. Statistics: B. New Gupta SahityaBhavan Agra
- 4. Statistics Methods: S.P. Gupta S. Chand & Sons
- 5. Fundamental of Statistics: S. C. Gupta Himalaya Publishing House
- 6. Business Mathematics & Statistics: NEWK Nag & S.C. Chanda Kalyani Publishers

Illustrative Question Paper Pattern for BB10 - Basic Statistical Techniques

Question No.	Unit	Nature	Max. Marks
1	I	a. Theory Question	8 Marks each
		b. Theory Question	
		OR	
		c. Theory Question	
		d. Theory Question	
2	II	a. Theory Question	8 Marks
		b. Numerical Question	8 Marks
		OR	
		 c. Numerical Question 	16 Marks
3	III	a. Theory Question	8 Marks
		b. Numerical Question	8 Marks
		OR	
		 c. Numerical Question 	16 Marks
4	IV	 Numerical Question 	8 Marks
		b. Numerical Question	8 Marks
		OR	
		 c. Numerical Question 	16 Marks
5	I	Short Answer Theory Question	4 Marks each
	II	Short Answer Theory Question	
	III	Short Answer Theory Question	
	IV	Short Answer Theory Question	
	MARKS	80	

BB 11 - Evolution of Business & Commercial Geography

Unit I-Evolution of Business & Economy: Industrial revolution (1820-1850); Rise of European business (1850-1900); Impact of First World War on International Business; The Great Depression and its effect on International Business; Impact of Second World War on International Business.

Unit II - Evolution of Business in post WWII Scenario: Cold War and its impact on International Business; OPEC Crises and its impact on International Business; Gulf War and its impact on International Business; Dawn of IT era and its impact on business & economy.

Unit III - Commercial Geography: Geography - meaning & its relation with Commerce & Commercial Geography - Nature and scope. Approaches of commercial Geography. 2. Geographical Environment & Commerce - Relationship between geographical environment and Commerce, Economic activities, Determinism and possibilism, Physical environment - Location, size and shape of



the country relief, climate, water bodies, soils, vegetation, animals, minerals, Cultural environment, settlements, transport, communication and technology.

Unit IV -Industries : Role of industries in Economic development; Factors of industrial location - Raw material, power, market, transport and communication, land capital, technology; Webers theory of industrial location, Iron & steel industry - India & USA, Cotton textile industry - India & USA. Engineering industry in India - Major industrial regions of the world and India.

Reference Books:

- 1. Global Governmentality Edited by Wendy Larner& William Walters, Routledge Resource
- 2. The Origins of Globalisation Karl Moore & David Charles Louis, Routledge Resource
- 3. British Business History (1720-1994) John F Wilson, Manchester University Press
- 4. The History of Family Business (1850-2000) Andrea Colli, Cambridge University Press
- 5. Exporting the American Model: The Post war transformation of European Business Marie-Laure Djelic, Oxford University Press
- 6. Order and Disorder after the Cold War Brad Roberts, MIT Press
- 7. Commercial Geography Sir Dudley Stamp.
- 8. Fundamentals of Economic Geography Van Royen&Bengston.
- 9. Economic Geography J. Alexander
- 10. Economic Geography Jones & Darkenwald.

BB 12 - Environment Management

Unit I: Introduction to Environment Management: Definition, Scope importance, Need for public awareness, sustainable development, Natural Resources- renewable and non- renewable resources, role of individual in conservation of natural resources(Forest, water, land, energy, mineral)

Unit II: Environment Pollution: Types of pollution- air, water, soil, noise, thermal and Nuclear, causes effectsna control measures, Global warming, green house effect, Ozone layer depletion, Acid rains

Unit III: Human Population: Global population growth, variations among nations, Population explosion- causes and impact, Family welfare Programs-methods of sterilization; Infectious diseases, water related diseases, risk due to chemicals in food, Cancer and environment

Unit IV: Social Issues in Environment: Construction of dams: problems and concerns of resettlement, rehabilitation of affected people; Environmental ethics– issues and possible solutions, resource consumption patterns and need for equitable utilization; Equity disparity in western and eastern countries; Urban and rural equity issues; Need for gender equity.

Reference Books:

- 1. A text book of environmental by K M Agrawal, P K Sikdar, S C Deb", published by Macmillan
- 2. Environment management by N K Uberoi", published by Excel Books
- 3. Environment management by Dr. Swapan Deb", published by Jaico Publishing House.
- 4. Environmental Management by S K Agrawal", published by A.P.H. publishing Corporation.

Bachelor of Business Administration (BBA) Examination



Semester - IV

BB 13 - Principles of Human Resource Management

Unit 1 : Introduction to Human Resource Management: Definition, concept and Scope of H. R. M., Difference between Personnel Management and H.R.M., Importance and Functions of H.R.M. Role of H.R Department.

Unit 2 : Job Analysis, Job Design: Meaning of Job Analysis, Uses, Process and methods of collecting data for job analysis, Job Description, Job Specifications. Meaning of Job Design, Techniques of Job Design

Unit 3 : Human Resource Planning - Recruitment - Selection: Definition and objectives of Human Resource planning, process of Human Resource planning factors influencing estimation of Human Resources, Concept of Recruitment & Selection, sources of recruitment, Selection Procedure

Unit 4 : Induction & Training : Concept of Induction, Training- Need for training, benefits of training, identification of training needs and methods/ types of training. Evaluation of effectiveness of training programs. Placement, Transfer, Promotion, Demotion.

Reference Books:

- Dr. S S Khanka: Human Resource Management,
- Aswathappa, K.; Human Resource and Personnel Management (Text and Cases), Tata McGraw Hill Publishing Company
- Dessler, Gary; Human Resource Management; Prentice Hall
- SubbaRao, Personnel and Human Resources management, HPH.
- Human Resource Management- Text and Cases-- VSP Rao

BB 14 - Money, Banking and Finance

Unit I: Money - Concept and functions of Money, Origin and development of Money, Limitations of Barter System, Classification of Money, Importance of Money, Qualities of Good Money, Defects of money.

Unit-II – Banking and Finance - Commercial Banking- Role and functions of Commercial Banks, Credit creation and its limitations Central Banking-Functions of Central Bank. Reserve Bank of India – Role in Indian Economy, Monetary & Non-Monetary functions of RBI.

Unit III: National Income Determination- Meaning, Method & Difficulties of Measuring National Income; Concept of GDP, GNP, NNP, PI, DPI. Inflation and Deflation- Types, Causes and Measures to Control.

Unit IV: Monetary and Fiscal Policy- Concept, Objectives, Instruments, Limitations of Monetary and Fiscal policy, Public Finance- Meaning, Scope and Importance of Public Finance, Public Finance Vs Private Finance.

Reference Books:

- 1. Appannaiah, Reddy &Shanthi, BBM Semester Economics, 2006, Himalaya Publishing House, Mumbai
- 2. Chaturvedi D., Macro Economics, 2005, Galgotia Publishing Company, New Delhi.
- 3. Dominick Salvatore, Managerial economics in a Global economy, 2006, Thomson learning Press
- 4. Datt, Ruddar and K P M Sundharam, 2005, Indian Economy, S.Chand and Co. Pvt. Ltd. New Delhi



- 5. Jhingan, 2004, M.L., Money Banking International Trade and Public Finance, Ed. 8, Veranda Publishers, New Delhi.
- 6. Mithani D. M., Money, Banking, International trade and Public Finance, 2006, Himalaya Publishing House, Mumbai
- 7. Samuelson, Paul Anthony and William D. Nordhaus, 1998, Economics, Ed. 6 New Delhi: Tata McGraw Hill Publishing Company Ltd, New Delhi.
- 8. Somashekhar N T., Money, Banking, International trade and Public Finance,2006,Himalaya Publishing House, Mumbai
- 9. Suma Damodran, Managerial Economics, 2006, Oxford University Press, New Delhi.

BB 15 - Introduction to Sociology & Psychology

Unit I: Sociology as the Science of Society: (a) Sociology – Meaning and Definitions, (b) Characteristics of Sociology as a science (empirical, theoretical, cumulative and nonethical), (c) Development of Modern Industrial Society – Characteristics, industrialism, capitalism, urbanism, liberal democracy, (d) Postmodern Society – Nature and Characteristics, (e) Culture – Meaning and elements, (cognitive elements, beliefs, values and norms and signs), Meaning, stages and agencies of socialisation.

Unit II: Social Structure and Social Change: (a) Structural aspects of social system – Institutions, groups, subgroups, roles, norms and values, (b) Social change – Its sources – Internal and External, (c) Types of Social Change – Changes in social values with reference to pattern variables, changes in occupational structure and demographic changes

Unit III: Introduction to Psychology: (a) Definition, Nature, Scope and Applications of Psychology. (b)Methods: Introspection, Observation, Experimental, Interview, Questionnaire and Case Study. (c)Contemporary Perspectives: Biological, Cognitive, Psychoanalytical, Humanistic, Evolutionary and Cross-cultural. (d)Biological Bases of Behaviour: Evolution, Genes and Behaviour. The Response Mechanism: Receptors, Effectors and Adjustors. (e)The Nervous System: The Basic Structure, Functions and Divisions of the Peripheral and Central Nervous System.

Unit IV: Social Psychology: (a)Introduction: Nature and Scope; Methods of Studying Social Behaviour: Observation, Experimental, Field Study, Survey, Sociometry and Cross-cultural. (b)Socialization: Agents and Mechanisms, Socialization and Deviation. (c)Perceiving Others: Forming Impressions; Role of Non-verbal Cues, Group stereotypes, Central Traits; Primary and Recency Effects; Models of Information Integration; Attribution of Causality: Biases and Theories (Jones and Davis, Kelley).

Reference Books:

- 1. Inkeles, Alex, "What is Sociology?", Prentice Hall of India, New Delhi, 1987
- 2. Jayaram N., "Introduction to Sociology", Macmillan India, Madras, 1988
- 3. Ghode R.N. and Bhau Daydar, "Sociology: Basic Concepts", Spectrum Publications, Nagpur
- 4. Atkinson and Hilgard (2002). Introduction to Psychology. New York: Thomson Wadsworth
- 5. Feldman, R. S. (2006). Understanding Psychology. India: Tata McGraw Hill.
- 6. Feldman, R. S. (1985). Social Psychology: Theories, Research and Application.New York: McGraw Hill.
- 7. Myers, David, G (1994). Exploring Social Psychology. New York: McGraw Hill.



B 16 - Business Legislations

Unit I: Administration of law & legal system in India - Introduction to legal aspects of Business in general; Freedom of Trade, Profession and Occupation (Constitutional Provisions).

Unit II: Indian Contract Act (1872) - a) Definition (Sec.2) b) Essential elements of a valid contract c) Competency to enter in contracts (Sec. 11 & 12).d) Consent – Free consent, Coercion, undue influence, fraud, misrepresentation, mistake (sec 13-23).Void Agreement (sec 24-30) f) Consequences of breach of contract (sec73-75).

Unit III: The Companies Act (1956) - Definition & characteristics of a company, Company distinguished from partnership, Kinds of Companies, Provisions relating to incorporation, lifting the Corporate Veil. Memorandum of Association, Doctrine of ultra-vires, Articles of Association, Doctrine of indoor management & constructive notice, Concept of Prospectus. Company Management And Board Meeting: Administrative Hierarchy, Board of Director - Director- Legal Position, Appointment, Qualification, Disqualification, Removals Power, duties, Liabilities etc. Managing Director - Meaning, Appointment, and Disqualification. Manager-Meaning, Disqualification. Company Meetings Meaning of meeting-General Body meeting - statutory Meeting, Annual General meeting, Extra ordinary meeting Board Meeting.

Unit IV: The Consumer Protection Act,1986 Salient features of Act. Definitions- Consumer, Complaint, Services, Defect and Deficiency, Complainant. Rights and Reliefs available to consumer. Procedure to file complaint. Consumer Disputes Redressal Agencies. (Composition, Jurisdiction, Powers and Functions.) Procedure followed by Redressal Agencies. Introduction to GST

Reference Books:

- 1) Business and Commercial Laws-Sen and Mitra.
- 2) An Introduction to Mercantile Laws-N. D. Kapoor
- 3) Business Laws-N. M. Wechlekar
- 4) Company Law-Avatar Singh
- 5) Law of Contract-Avtar Singh
- 6) Consumer Protection Act in India .Niraj Kumar
- 7) Consumer protection in India. V.K.Agrawal
- 8) Consumer Grievance Redressal under CPA. Deepa Sharma.

Bachelor of Business Administration (BBA) Examination

Semester - V

BB 17 - Entrepreneurship Development

Unit I:Entrepreneur & Entrepreneurship: Evolution of the concept of Entrepreneurs, Characteristics of an Entrepreneur, Distinction between an entrepreneur and a manager; functions of an entrepreneur, types of entrepreneurs, concept of intrapreneurs; growth of entrepreneurship in India, role of entrepreneurship in economic development,.

Unit II:Entrepreneurial growth: Factors - Economic factors, non-economic factors, Government actions; Entrepreneurial competencies - meaning, major competencies, developing competencies; Entrepreneurship Development Programs (EDPs) - Need, objectives, course content of EDPs, phases of EDPs, evaluating EDPs.

Unit III:Small Enterprises: An introductory framework: Definition, characteristics, relationship between small and large units, rationale, objectives, scope, opportunities for entrepreneurial career, problems of SSIs; Project Identification and Selection (PIS) - Meaning of project, project identification,



project selection, contents of project reports, formulation of project reports; Project Appraisal - Concept, methods, economic analysis, financial analysis, market analysis, technical feasibility, managerial competence.

Unit IV:Institutional & financial support to Entrepreneurs: Need for institutional support, various institutions supporting entrepreneurship in India – MIDC, MSME, MCED, DIC, SSIB, MSSIDC, BIFR; Financial support to entrepreneurs: Commercial banks, other financial institutions – IDBI, IFCI, SFCs, SIDBI, venture capital.

Reference Books:

- 1. Entrepreneurship 6 th edition. Robert D Hisrich, Tata McGraw-Hill.
- 2. Kuratko- Entrepreneurship A Contemporary Approach, (Thomson Learning Books)
- 3. Small-Scale Industries and Entrepreneurship. Desai, Vasant (2003). Himalaya Publishing House, Delhi.
- 4. S.S. Khanka Entrepreneurial Development (S. Chand & Co.)
- 5. Exploring Entrepreneurship, Blundel& Lockett, Oxford University Press
- 6. Entrepreneurship, Roy, Oxford University Press

BB 18 - Principles of Operations Management

Unit I: Introduction to Operations Management: Introduction to Operations Management, its Nature, Scope, Importance and Functions. Difference between production, manufacturing and service. Concept and types of production, mass, job-based, batch and assembly line production system. Types of services.

Unit II: **Facilities and Production Planning**: Factors affecting plant location, types of plant layouts – product layout, process layout, fixed position layout, cellular layout, types of service layouts. Concept of production planning, definitions of capacities, master production schedule, material planning. Introduction to maintenance.

Unit III: **Material Management:** Scope of materials management, Purchase and Stores Functions, Introduction to warehouse management, Concept of Lead time, re-order level, minimum and maximum stock, Basic concepts of Inventory management, inventory costs, ordering and carrying cost

Unit IV: Quality Management and Productivity: Introduction to quality, dimensions of quality, concept of product, process and service quality. Introduction to Quality Management System, concept of TQM, ISO, Kaizen, Quality circles, Six-sigma. Concepts of productivity, machine, labour and cost productivity.

Reference Books:

- 1. Operations Management by Shridhar, Himalaya Publishing House
- 2. Operations Management Nair: TMH
- 3. Production and Operations Management, Adam & Ebert, Prentice Hall India
- 4. Operations Management by Chary ,Mcgraw Publications, 4th edition.
- 5. Production and Operations Management, K.Aswathappa&K.ShridharaBhat, Himalaya Publication
- 6. Production and Operations Management, R.Panneerselvam, 3rd Edition, Eastern Economy Edition.

BB 19 - International Business Environment



Unit I: Introduction to International Business: Importance, nature and scope of International business; Modes of entry into International Business; Internationalization process and managerial implications; Issues in foreign investments, technology transfer, pricing and regulations; International collaborative arrangements and strategic alliances; Concept and significance of balance of payments account

Unit II: International Business Environment: Economic, Political, Cultural and Legal environments in International Business. Framework for analyzing international business environment.

Unit III: Global Trading and Investment Environment: World trade in goods and services – Major trends and developments; World trade and protectionism – Tariff and non-tariff barriers; Foreign investments-Pattern, Structure and effects; Movements in foreign exchange and interest rates and their impact on trade and investment flows.

Unit IV: International Economic Institutions and Agreements: WTO, WTO and Developing Countries, IMF, World Bank, UNCTAD, International commodity trading and agreements. Structure and functioning of EC and NAFTA, Regional Economic Groupings in Practice: Levels of Regional Economic Integration; Regionalism vs. Multilateralism; Important Regional Economic Groupings in the World.

Reference Books:

- 1. Bennet, Roger, International Business, Financial Times, Pitman Publishing, London.
- 2. Bhattacharya, B., Going International: Response Strategies of the Indian Sector, Wheeler Publishing, New Delhi.
- 3. Czinkota, Michael R., et. al., International Business, the Dryden Press, Fortworth.
- 4. Danoes, John D. and Radebaugh, Lee H., International Business: Environment and Operations, Addison Wesley, Readings.
- 5. Hill, Charles W. L., International Business, McGraw Hill, New York.

BB 20 - Research Methodology

Unit I: Introduction - Meaning, Objectives and Types of research, Research Approach, Research Process, Relevance & scope of research in management. **Research Design -** Features of good Design, Types of Research Design,

Unit II: Sampling Design - Steps in sample Design, Characteristics of a good sample Design, Probability & Non Probability sampling. Hypothesis - Meaning, Types, Process, Formation of Hypothesis, Testing of Hypothesis

Unit III: Measurement & scaling techniques - Errors in measurement. Test of sound measurement, Scaling and scale construction technique. Attitude Measurement and Scales: Introduction to attitude - Various Methods to measure attitude.

Unit IV: Methods of data collection - Primary data – questionnaire and interviews; Collection of secondary data. **Interpretation of data -** Techniques of Interpretation, Report writing, Layout of a project report, preparing research reports.

Reference Books:

- 1. Research Methodology C.R. Kothari
- 2. Business Research Methods Naval Bajpai
- 3. Business Research Methodology J K. Sachdev

Bachelor of Business Administration (BBA) Examination

Semester - VI



Elective A - Financial Management

Paper 1

BBEL1 - Fundamentals of Business Finance

- **Unit -I: Mathematics of Finance** Concept of Time Value of Money, Compounding and Discounting of single cash flow, series of cash flow and annuity. Simple problems based on Time Value of Money
- **Unit -II: Capital Budgeting** Premises of Capital Budgeting Decisions, Tools in Capital Budgeting, Pay Back Period, Average Rate of Return on Investments, Net Present Value, IRR.
- **Unit -III: Dividend decision and Management of Earnings -** Relevance approach of dividend valuation models, Irrelevance approach of dividend valuation models, Stability of dividend, Factors determining dividend decisions.
- **Unit IV: Corporate Restructuring -** Reasons & drivers of corporate restructuring, Methods of restructuring- mergers (types of merger), takeovers, acquisitions (Types of Takeover/ acquisition), divesting/ demerger, spin-off, split ups

Simple Numerical will be based on Unit I, II and III only.

Reference Books:

- 1) Financial Management by Ravi Kishore, Taxmann Publications Pvt Ltd
- 2) Financial Management I M Pandey S. Chand & Co. Pvt. Ltd. (Old editions in Vikas Publications)
- 3) Financial Management , Theory, Concepts and Problems by Dr. R. P. Rustagi, Taxmann Publications Pvt Ltd
- 4) Financial Management, Text, Problems and Cases, by M Y Khan and P K Jain, McGraw-Hill Publications

Paper 2 BBEL2 - Advanced Financial Management

- **Unit -I: Banking Services and Operations -**Definition of banks, Functions of Commercial Banks, Banking Structure in India, Role of RBI vis-a-vis other commercial banks, Introduction to Bank Deposits, Types of Deposit Accounts, KYC
- **Unit -II: Insurance Services -** Concept of insurance, principles of insurance, Traditional and Unit linked policies, individual and group policies, Different type of insurance products whole life products, term assurance annuities, and endowment, Medi-Claim and health insurance products.
- **Unit -III: Mutual Funds -** Organization Structure, Classification of Funds -Types of Funds Equity Funds, Debt Funds, Liquid Funds, Balanced Funds, Monthly Income Plans, ETFs, Commodity Funds, Fund of Funds, Sectoral Funds, ELSS; Calculation of NAV; Systematic Investment Plans; Concept of Cost Averaging and Value Averaging.
- **Unit IV: Capital Market -** Introduction to Capital Markets, Structure of Capital Market, Primary and Secondary Market, Stock Exchanges in India- BSE, NSE, OTCEI, ICSEI, Functions of Stock Exchange, SEBI and Role of SEBI in Capital Market

Reference Books:

- 1) Indian Financial System by Bharti V Pathak Pearson Publications
- 2) Indian Financial System by M Y Khan McGraw-Hill Publications



- 3) Financial Markets and Services, Gordon and Natrajan, Himalaya Publications
- 4) Financial Services, SandeepGoel, PHI Publications
- 5) Know Your Bank (volume I to VI) published by IIBF
- 6) Life and Health Insurance, 13th Edition by Kenneth Black Jr., Harold D. Skipper Jr., PHI Publications

Elective B-Human Resource Management

Paper 1

BBEL1 - Fundamentals of Human Resource Management

Unit 1: Introduction: Concept, HRM; Evolution of HRM; Challenges of HRM; Role of Human Resource Management in strategic management, Characteristics of Workforce today

Unit 2 : Performance Appraisal :Concept and Introduction, Importance, process – methods of performance appraisal – Traditional & Modern Methods.

Unit 3 : Job Evaluation & Compensation management: Concept, objectives and methods of Job Evaluation, Wages & Salary, components of employee remuneration – – base and supplementary. Wages & Salary Administration

<u>Unit 4 : Legal Aspects :</u>Introduction to Provident Fund Act, Employee State Insurance Corporation Act, Minimum Wages Act, Industrial Relations Act, Industrial Dispute Act.

ReferenceBooks:

- Dr. S S Khanka: Human Resource Management,
- Aswathappa, K.; Human Resource and Personnel Management (Text and Cases), Tata
- Rao, VSP, Human Resource Management, Text and Cases
- Dessler, Gary; Human Resource Management; Prentice Hall
- SubbaRao, Personnel and Human Resources management, HPH.
- SeemaSanghi, Human Resource Management

Paper 2 BBEL2 - Advanced Human Resource Management

Unit 1: Job Analysis, Job Design & Job Evaluation: Job Analysis & Design - Job Analysis – Meaning, Uses, Competency approach to job analysis, Job Description, Job Specifications & Role Analysis, Factors affecting Job Design, Techniques of Job Design, Cases and Exercises in understanding Job Analysis. Job Evaluation – Concept, objective & methods.

Unit 2:Performance Appraisal: Nature, Objectives of Performance Appraisal, Performance Planning and Potential Appraisal, Pitfalls of Appraisal, Praise and Recognition; Rewards and Incentives; Promotions. HR Records, MIS HR Reports, HR Formats – Personnel Files, Attendance, Leave, Medical Records.

Unit 3 : Industrial Relations :Nature, Concept, scope, objectives & significance of Industrial Relations, Trade unions, Functions of Trade Unions - Forms of collective bargaining - Workers' participation in management, Nature & causes of Industrial Dispute and Settlement of Industrial Disputes.

Unit 4 : Ancillary Topics: Goal Setting, Promotions and Transfers; Separations- Retirement, VRS, Deputation, Death, Retrenchment, Pink Slips, Competency Mapping, Employee Manual / PPP Handbook. Concept of Retention and Attrition. Online recruitment; Employee referrals; Recruitment



process outsourcing Head hunting; Downsizing; Voluntary retirement schemes (VRS) HR outsourcing, Job Rotation & Transfer

Reference Books:

- Dr. S S Khanka: Human Resource Management,
- Aswathappa, K.; Human Resource and Personnel Management (Text and Cases), Tata
- Rao, VSP, Human Resource Management, Text and Cases
- Dessler, Gary; Human Resource Management; Prentice Hall
- SubbaRao, Personnel and Human Resources management, HPH.
- SeemaSanghi, Human Resource Management

Elective C-Marketing Management

Paper 1

BBEL1 - Fundamentals of Marketing Management

- **Unit I: Integrated Communication Mix (IMC)** -meaning, importance; Communication meaning, importance, process, communication mix-components, role in marketing,
- **Unit II: Branding -** meaning, brand recall, brand positioning. Importance of branding and advertising. Digital Marketing Scope and Importance, Search Engine Optimisation (SEO), Out of home (OOH).
- **Unit III: Sales Organisation and Relationship**: Purpose of sales organization, Types of sales organization structures, Sales department external relations, Distributive network relations.
- **Unit IV: Concept of services -** Nature & characteristics of services, Marketing Mix and strategies in Service Marketing, Product decisions, pricing strategies, Promotion of services, Placing or Distribution methods of services, Service vision & Strategies: Includes Advertisements, Branding, Packaging of Services.

Reference Books:

- 1. Marketing Mgt. by Philip Kotler (PHI)
- 2. Marketing Management by RajanSaxena, Tata McGraw Hill, Education
- 3. Service Sector Management by S M Jha
- 4. Sales Management Cundiff, Still, Govoni

Paper 2 BBEL2 - Advanced Marketing Management

- **Unit I : Sales Management :** Evolution of sales function, Objectives of sales management positions, Functions of Sales executives, Relation with other executives, Salesmanship : Theories of personal selling, Types of Sales executives, Qualities of sales executives, Prospecting, pre-approach and post-approach, Organising display, showroom & exhibition
- **Unit II: Distribution network Management**: Product Distribution Channel & Types of Marketing Channels, Factors affecting the choice of channel, Types of middleman and their characteristics,



Wholesale and Retail, Supply Chain Management (SCM) and introduction to Supply Chain Management, Various types of Warehousing and transportation facilities.

Unit - III: Service Quality - Impact of service Quality, Approaches to service Quality, Ten original dimensions of Service Quality, How to improve service Quality, Service quality information systems, Benchmarking and certification. Marketing challenges in services business; Classification of services; End user, Profit orientation, Services tangibility, People based services, Expertise. Role of IT in service industry.

Unit - IV: Customer Retention & Relationship Marketing: CB-Services, Facts & Importance of CB in services, Evolution of Relationship Marketing, Enhancement of Internal & External relationships, Customer Retention (Operations, Delivery System). Various types of services offered to customers – hotel, hospital, transport, insurance, banking and education.

Reference Books:

- 1. Marketing Mgt. by Philip Kotler (PHI)
- 2. Marketing Management by RajanSaxena, Tata McGraw Hill Education
- 3. Service Sector Management by S M Jha
- 4. Sales Management Cundiff, Still, Govoni



Subject wise Core Elective Papers

M. Sc. Subject	Core elective paper to be opted in sem III (Sem V in case of M. Sc.	Core elective paper to be opted in sem IV (Sem VI in case of M. Sc.	
	(Tech) Applied Geology)	(Tech) Applied Geology)	
M. Sc. (Computer Science)	Neural Network	Design and Analysis of Algorithm	
	Multimedia Technologies	Embedded System	
	ASP.NET	Pattern Recognition	

Foundation Course: (Candidate can opt for any one foundation course paper as shown below in the semester III and IV (Semester V & VI in case of M. Sc. (Tech) Applied Geology). However, Student shall opt for this paper from any other subject other than his / her main subject for postgraduarion. If the candidate decides to opt for foundation course papers then he/she shall not be eligible to opt for Core (Subject Centric) papers in their respective subjects). List of foundation courses available:

M. Sc. Subject	Foundation Course I in semester III (Sem V in case of M. Sc. (Tech) Applied Geology)	Foundation Course II in Semester IV (Sem VI in case of M. Sc. (Tech) Applied Geology)			
M. Sc. (Computer Science)	Operating system concepts	Advances in information technology			
	Principles of Management	Banking Operations And Services			
	E-Business	Information Security And Cyber Law			

Core (Discipline Centric): (Candidate can opt for this paper as shown below in the semester III and IV (Semester V & VI in case of M. Sc. (Tech) Applied Geology) in their main subject of post graduation only. If the candidate decides to opt for Core (Subject Centric) papers in their main subject of post graduation then he/she shall not be eligible to opt for Foundation Course papers neither in their own subject nor in any other subject). List of Core (Subject Centric) course available in the respective subject:

M. Sc. Subject	Core (Discipline Centric) I in semester III (Sem V in case of M. Sc. (Tech) Applied Geology)	Core (Discipline Centric) II in Semester IV (Sem VI in case of M. Sc. (Tech) Applied Geology)
M. Sc. (Computer Science)	Mobile Computing	Parallel Computing
	Digital & Cyber Forensics	Mobile & Cyber Forensics



$Scheme\ of\ teaching\ and\ examination\ under\ semester\ pattern\ Choice\ Based\ Credit\ System\ (CBCS)$ for M.Sc.Computer\ Science

Semester I	for M.Sc. Compu	iter S	Scien	ice							
Code		Teaching scheme (Hours / Week)				Examination Scheme					
	actical					hrs.	Max.	Marks	S	Minimu Passing	
	Theory / Practical	Th	Pract	Total	Credits	Duration in hrs.	External Marks	Internal Ass	Total Marks	Th	Pract
Core 1	Paper 1 Discrete Mathematical Structure	4	-	4	4	3	80	20	100	40	
Core 2	Paper 2 Programming in Java	4	-	4	4	3	80	20	100	40	
Core 3	Paper 3 Digital Electronics and Microprocessor	4	-	4	4	3	80	20	100	40	
Core 4	Paper 4 Advanced DBMS and Administration	4	-	4	4	3	80	20	100	40	
Pract. Core 1 &	Practical 1 based on theory paper-1 and 2	-	8	8	4	3-8*	100	-	100		40
Pract. Core 3 &	Practical 2 based on theory paper-3 and 4	-	8	8	4	3-8*	100	-	100		40
Seminar 1	Seminar 1	2	-	2	1			25	25	10	
	TOTAL	18	16	34	25		520	105	625	170	80



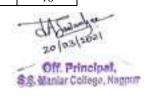
Semester II	for M.Sc. Compu	ıter S	Scien	ce							
Code		(eachi schen Hour Week	ne s /		Examination Scheme					
	ractical					ı hrs.	Max.	Marks	S	Minimu Passing	
	Theory / Practical	Th	Pract	Total	Credits	Duration in hrs.	External Marks	Internal Ass	Total Marks	Th	Pract
Core 5	Paper 5 Windows Programming using VC++	4	-	4	4	3	80	20	100	40	
Core 6	Paper 6 Theory of Computation and Compiler Construction	4	-	4	4	3	80	20	100	40	
Core 7	Paper 7 Computer Architecture and Organization	4	-	4	4	3	80	20	100	40	
Core 8	Paper 8 Computer Graphics	4	-	4	4	3	80	20	100	40	
Pract. Core 5 & 6	Practical 3 based on theory paper-5 and 6	-	8	8	4	3-8*	100	-	100		40
Pract. Core 7 & 8	Practical 4 based on theory paper-7 and 8	-	8	8	4	3-8*	100	-	100		40
Seminar 2	Seminar 2 TOTAL	2 18	- 16	2 34	1 25		520	25 105	25 625	10 170	80



Semester II	I for M.Sc. Comp	uter	Scie	nce							
Code		Teaching scheme (Hours / Week)				Examination Scheme					
	actical					hrs.	Max.	Max. Marks		Minimum Passing Marks	
	Theory / Practical	Th	Pract	Total	Credits	Duration in hrs.	External Marks	Internal Ass	Total Marks	Th	Pract
Core 9	Paper 9 Data Communication and Networks	4	-	4	4	3	80	20	100	40	
Core 10	Paper 10 Software Engineering	4	-	4	4	3	80	20	100	40	
Core Elective 1	Paper 11 CE1-1 Neural Network CE1-2 Multimedia Technologies CE1-3 ASP.NET	4	-	4	4	3	80	20	100	40	
Foundation Course 1/ Core(Subj ect Centric)1	Paper 12 FC1-1 Operating System Concepts FC1-2 Principles of Management FC1-3 E-Business CDC1-1 Mobile Computing CDC1-2 Digital & Cyber Forensics	4	-	4	4	3	80	20	100	40	
Pract. Core 9 & 10	Practical 5 based on theory paper-9 and 10	-	8	8	4	3-8*	100	-	100		40
Pract. Core Elective 1	Practical 6 based on paper 11	-	8	8	4	3-8*	100	-	100		40
Seminar 3	Seminar 3 TOTAL	2 18	16	2 34	1 25		520	25 105	25 625	10 170	80



Semester IV for M.Sc. Computer Science											
Code		Teaching scheme (Hours / Week)				Examination Scheme					
	ractical					n hrs.	Max. Marks		SX	Minimum Passing Marks	
	Theory / Practical	Th	Pract	Total	Credits	Duration in hrs.	External Marks	Internal Ass	Total Marks	Th.	Pract
Core 11	Paper 13 Data Mining	4	-	4	4	3	80	20	100	40	
Core 12	Paper 14 Artificial Intelligence & Expert System	4	-	4	4	3	80	20	100	40	
Core Elective 2	Paper 15 CE2-1 Design and Analysis of Algorithm CE2- 2Embedded System CE2-3 Pattern Recognition	4	-	4	4	3	80	20	100	40	
Foundation Course 2/ Core(Subj ect Centric)2	Paper 16 FC2-1 Advances in Information Technology FC2-2 Banking Operations And Services FC2-3 Information Security And Cyber Law CDC2-1 Parallel Computing CDC2-2 Mobile & Cyber Forensics	4	-	4	4	3	80	20	100	40	
Pract.	Practical 7	-	8	8	4	3-8*	100	-	100		40



Core 11, 12 & Elective 2	based on theory paper-13,14,15.					**				
Project	Project		8	8	4	100	-	100		40
Seminar 4	Seminar 4	2	-	2	1		25	25	10	
	TOTAL	18	16	34	25	520	105	625	170	80



Note: Th = Theory; Pr = Practical/lab, * = If required, for two days.

** = The Practical and Project shall be evaluated by both External and Internal Examiner in the respective Department / Center / Affiliated College as per guidelines appended with this direction.

M.Sc. (Computer Science)

Semester I

Paper 1: Discrete Mathematical Structure

Hours/Week: 4 Credits: 4

Unit-1:

Fundamental –Sets and Subsets, operations on sets, sequence, Division in the integer, Matrices, Mathematics Structures. Logic-Proposition and Logical Operation Conditional Statements, Methods of Proof, Mathematical Induction,

MathematicsLogic- Statements and Notation, Connectives ,Normal Forms ,The Theory of Interface for the statement Calculus ,Inference Theory of the Predicate Calculus,

Unit-2:

Counting-Permutation, Combination, The pigeonhole Principle, Recurrence Relations. Relationaland Digraphs- Product sets and Partitions, Relations and Digraphs, Paths in Relations and Digraphs Properties of Relations, Equivalence Relations, Computer Representation of Relations and Digraph, Manipulation of Relations, Transitive Closure and Warshall's Algorithms. Functions-Definition and Introduction, Function for Computer Science, Permutation Functions, Growth of Functions.

Unit-3:

Graph Theory: Basic Concept of Graph Theory, Euler Paths and Circuits, Hamiltonian Paths and Circuits. Otherrelations and Structure- Partially Ordered Sets, Lattices Finite Boolean-Algebra, Functions of Boolean Algebra's, Boolean function as Boolean Polynomials. Tree-Introduction Unidireted Tree, Minimal Spanning Trees.

Unit-4:

Semigroups and Groups: Binary Operations Revisited, Semigroups, Products and Quotations of Groups. Introduction to computability –Languages Finite –State Machines, Semigroup, Machines and Language.

Books:

- 1. Discrete Mathematical Structures By Bernard Kolmanc, Busby & Sharon Ross [PHI]
- 2. Discrete Mathematical Structures with Application to computer science By J.P.Tremblay&R.Manohar [Tata McGraw –Hill]
- 3. Combinational Mathematics By.C.J.Liu

Reference Books:

- 1.Discrete Mathematics with Graph Theory By Goodaire[PHI]
- 2. Discrete Mathematics by J.K.Sharma(McMillan)
- 3. Discrete Mathematics and its Applications By Kenneth Rosen (TMH)
- 4. Discrete Mathematics By Seymour Lipschutz, Marc Lipson (TMH)
- 5. Discrete Mathematics : Rajendra Akerkar, Pearson

Paper 2: Programming in Java



Hours/Week: 4 Credits: 4

Unit-1:

Java and Internet, Features of java: security, portability, multithreading, etc, Bytecode, Datatypes, variables and Arrays, Operators, Classes: declaring objects, methods, constructor, overloading constructor, garbage collection, finalize() method, static variable and method, final variable, command line argument. Inheritance: super keyword, final with inheritance. Packages and Interfaces.

Exception handling: Overview, types, Uncaught exception, try-catch block, multiple catch, nested try, throw, throws, finally, bulit-in and user-defined exception.

Multithreading: Life Cycle, Thread class and Runnable Interface, isAlive(), join(),Priorites, Synchronization: sleep(), run(). Interthreadcommunication: wait(), notify(), notifyAll(), deadlock. String Handling.

Unit-2:

Wrapper classes, Applet: Applet Class, Architecture, Life Cycle, Display methods, HTML APPLET Tag, Passing parameter to Applet

AWT: working with Windows, Controls, Layout Manager, Menus. Swings. Event handling.

Unit-3:

JDBC: Architecture, JDBC-ODBC bridge driver, SQL Package, ResultSet and its methods.

Networking: Socket, Reserve socket, Internet Addressing, InetAddress, TCP/IP client socket, TCP/IP server socket, URL, URL Connection, Datagram.

RMI: Introduction, Architecture, Remote Interface, java.rmi. server package, class naming, creating Rmi server and client ,transmitting files using rmi, client side callback, RMISECURITYMANAGER class, RMI Exception, Stub and Skeleton.

Unit-4:

Servlet: Life Cycle, Tomcat, javax. servlet package, reading servlet parameter, javax.servlet.http package, handling http request and response with HTTPGET and HTTPPOST, cookies,session tracking. JSP: Introduction, Types of JSP tags, Application using JSP and Servlet.

JavaBeans: Advantages of Beans, BDK, JAR files, Introspection, Developing Beans using BDK.

- 1. Complete Reference by Herbert Schildt (TMH)
- 2. Programming with Java By C Muthu (McGraw Hill)
- 3. Black Book on java.



Paper 3: Digital Electronics and Microprocessor

Hours/Week: 4 Credits: 4

Unit-1:

Number System and Data Representation

Number System: Binary, Octal, Decimal and Hexadecimal number system and their inter conversion. Binary Codes: BCD, Excess3, Parity, Gray, ASCII, EBCDIC codes and their advantages and disadvantages. Data Representation: Positive, negative, maximum and minimum number representation (related to 8 bit number), real number representation, underflow, overflow, range and accuracy. Binary Arithmetic: Binary addition, decimal subtraction using 9's and 10's compliment, binary subtraction using 1's and 2's compliment, multiplication and division. Logic gates: Truth table, properties and symbolic representation of NOT, AND, OR, NOR, NAND, EXOR, EXNOR gates. NOR and NAND gates as a universal gates.

Unit-2:

Boolean Algebra: Laws and Identities of Boolean algebra, DeMorgan's Theorem , use of Boolean Algebra for simplification of logic expression, K-Map for 2,3,4 variables, simplification of SOP and POS logic expression using K-Map.

Combinational circuits: Half adder, Full Adder, Parallel adder, Half subtractor, Full Subtractor, 4-bit binary adder subtractor, Multiplexer, Demultiplexer, Decoder, Encoder, Parity detector.

Unit 3:

Sequential Circuits: Flip-Flops: Construction and working of RSFF, JKRSFF, DFF, TFF, JKFF, and JKMSFF. Counters: Construction and working of asynchronous, synchronous, up-down counter, shift registers and their types, Ring counter, Jonhson counter with their time diagram.

Unit-4:

Architecture of 8086 and Assembly Language Programming

Block diagram of 8086, Pin diagram of 8086, Addressing modes, Instruction set: Data transfer, Arithmetic, Logical, String manipulations, Control Transfer, Unconditional branch, Conditional branch, Flag, Processor control. Assembler directives and operators, simple assembly programs.

- 1.Digital Electronics by Gothman(PHI)
- 2. Digital and analogue technique by Navaneeth, Kale and Gokhale
- 3. Fundamental of Micropocessor by B Ram
- 4. Microcomputers Systems: The 8086/8088 family by Liu. Gibson
- 5. Modern Digital Electronics By Jain (TMH)



Paper 4: Advanced DBMS and Administration

Hours/Week: 4 Credits: 4

Unit-1:

Relational Database design: Functional dependencies, and Normalization Normal forms based on primary keys (1 NF, 2 NF, 3 NF, BCNF, 4 NF, 5 NF) Loss less joins and dependency preserving decomposition Query Processing: Query Processing Stages, Query Interpretation, Equivalence of Expressions, Query Resource Utilization, Query Execution Statistics, Query Execution Plan, Estimation of Query Processing Cost, Table Scan, Sample Index Access, Fill Factor, Multiple Index Access, Methods for Joining Tables (Nested Loop, Merge Join, Hybrid Join, Multiple Join) Structure of a Query Optimizer

Unit-2:

Transaction Processing & Concurrency Control: Concept and definition of transaction, ACID properties, serializibility, Prioritization, states of transaction, Types of failure, desirable properties of transaction schedules and recoverability, serial usability of schedules, levels of transaction consistency, deadlocks, long duration transactions, transaction performance, transaction processing as implemented in contemporary database, management system. Concurrency Control, locking techniques, techniques based on time-stamp ordering, multiple granularity. Crash Recovery: failure classification, recovery concepts, database backup, recovery concepts based on deferred update and on immediate update. Shadow paging, check points, on-line backup during database updates, crash recovery techniques.

Client/Server database: Evolution of client concept, Client/Server environment, characterization of Client/Server computing. Functions of clients server, application partitioning, the two-layer and three-layer architectures, communication between clients and servers.

Unit-3:

Oracle Database Architectureand Administration: Oracle database architecture, Design, Creation, Migration and Management of Oracle Databases and related database schemes, Data Dictionary views and standard package Maintaining the control, Redo Loa files, Managing Tablespaces and Data Files, Storage structure and relationships, Managing rollback segment, Managing tables, Indexes, Managing data Integrity, Managing password security and resources, Managing users, Privileges, roles.

Oracle Backup and Recovery Strategies: Backup and recovery considerations, Oracle recovery structure and processes, Oracle backup and recovery configuration, Physical backup, Complete recovery of an Oracle database, Incomplete recovery of an Oracle database with Archiving, Oracle Export / Import utilities, Oracle standby database.

Unit-4:

Oracle Tuning and Troubleshooting:Oracle performance tuning methodology,'Oracle alert and trace files, Tuning the shared pool, Buffer Cache, Redo Log buffer, Database configuration and I/O issues, Using Oracl Blocks efficiently, Optimizing sort operations, Rollback segment tuning, Monitoring and detecting lock contention, SQL issues and tuning considerations for different application. Integrity, Security: Need for Database Integrity, Integrity Constraints, Non-Procedural and Procedural Integrity Constraints Specifications in SQL, Introduction to Database Security issues, Authorization and use.



Books:

- 1. Fundamental of Database Systems by R. Elmasri; S. Navate; Benjamin Cummings;
- 2. Introduction to database systems by C. J. Date
 3. Database system concept by Korth
- 4. DBA Handbook oracle press by Loney

- 1. Principles of Database Management by James Martin
- 2. Relational database design for Micro computers Application by Prentice Hall (Jackson)
- 3. Database Management Systems by Bipin Desai



M.Sc. (Computer Science)

Semester II

Paper 5: Windows Programming using VC++

Hours/Week: 4 Credits: 4

Unit-1:

Windows, Visual C++, Application Frameworks Fundamentals and MFC Libraries View Class. Introduction, MFC, ATL and WFC, Windows Programming Model, Components, Application Framework, MFC Library, Event Handling, Mapping Modes and Scrolling Views, Graphic Device Interface, Colors and Fonts, Modal Dialog and Windows Common Control, Modeless Dialog and Windows Common Dialog, ActiveX Controls and Internet Explorer Common Controls, Win32 Memory Management, Bitmaps, Message Processing and Multithreaded Programming.

Unit-2:

Document View Architecture: Menus, Keyboard Accelerators, Rich Edit Control and Property Sheets, Tool bar and Status Bars, Reusable Frame Window Base Class, Separating the Documents from its View, Reading and Writing Documents- SDI applications, MDI applications, Printing and Print Preview, Splitter Windows and Multiple Views, Context-Sensitive Help, DLL's, MFC Programs without Documents or View Classes

Unit-3:

Active X: COM, Automation and OLE: Component Object Model, Automation, Uniform Data Transfer- Clipboard Transfer and OLE, Drag and Drop, Structured Storage, OLE Embedded Components and Containers, Introducing the Active Template Library, ATL and ActiveX Controls.

Unit-4:

Database Management: Database Management with Microsoft ODBC, Database Management with Microsoft Data Access Objects, OLE DB Templates.

Programming for the Internet: TCP/IP, Winsock, WinInet, Programming the Microsoft Internet Information Server, ActiveX document Servers and the Internet, Introducing the Dynamic HTML, Visual C++ for Windows CE.

Books:

1. Programming Microsoft Visual C++ by D. J. Kruglilski, G Shepherd and Scot Wingo Publication : Microsoft Press Fifth Edition.

- 1. Visual C++ 6 From The Ground Up: Mueller: TMH Publication
- 2. VC++ 6 The Complete Reference: Pappas, TMH Publication



Paper 6: Theory of Computation and Compiler Construction

Hours/Week: 4 Credits: 4

Unit-1:

Finite Automation and Regular Expression: Finite State systems, Basic Definitions, Non - deterministic finite Automata, Finite Automata with moves, Regular Expressions, Two way finite automata, Finite automata with output, Application on Finite Automata.

Properties of Regular Sets : The pumping lemma for Regular Sets, Close properties of Regular sets, Decision Algorithms for Regular Sets.

Context Free Grammars: Motivation and Introduction, Context Free Grammar, Derivation Tree, Simplification of context Free Grammars, Chomsky Normal form, Greibach normal form, The existence of inherently ambiguous context free languages.

Properties of Context free languages : The pumping lemma for CFL's , Closure properties of CFL's, Decision Algorithm for CFL's

Unit-2:

Push Down Automata: Informal description, Definitions, Push – Down Automata & Context free languages.

Turing Machine: Introduction, The Turing Machine Model, Computable languages and functions, Techniques Turing Machine construction, Modification of Turing Machines, Churchs Hypothesis, Turing Machine as enumerators, Restricted Turing Machine equivalent to the basic model. Undecidability: Problems, properties of recursive and recursively enumerable problem, Turing Machine and undecidable problem, Rice theorem, Tool for proving CFL undecidable, Greibach's Theorem.

The Chomsky : Regular Grammars, Unrestricted Grammars, Context – Sensitive languages, Relation between classes of languages.

Unit-3:

Introduction to Compilers:

Compilers and translators, need, the structure of a compiler, Lexical Analysis, Syntax analysis, Intermediate code Generation, Optimization, Code Generation, Book keeping, Error Handling, Compiler writing tools. Basic parsing Techniques: Parsers, Shift-reduce parsing, Operator precedence parsing, Top-down parsing, predictive parsers, automatic construction of efficient parsers: LR parsers the canonical collection of LF (O) items, constructing SLR parsing tables, constructing LALR parsing tables, Ambiguous grammar.

Unit-4:

Syntax directed translation: syntax directed translation schemes, implementation, intermediate code, postfix notation, parse tree and syntax trees, tree- address code, quadruple, triple, translation of Symbol Table: Data Structure, Representation of Scope Information,

Code Optimization: The principal source optimization, Loop optimization, The DAG Representation of basic blocks, Value number and algebraic laws, Global data-flow analysis.

Code Generation: Object Programmers Problems in code generation, A machine model, a simple code generator, Register Allocation and assignment, Code Generation from DAG's Peephole Optimization.



Books:

- 1. Introduction to Automata Theory, Languages and Computation: John E. Hoperott& Jeffery D. Illman
- 2. Compilers Principles, Techniques and Tools Aho, Ullman, Ravisethi, Pearson Education.
- 3. Theory of Computer Science : E. V. Krishmamoorty.
- 4. Theory of computer Science: K. L. P. Mishra.

- 1. D. I. A. cohen: Introduction to Computer Theory (JW)
- 2. H. R. Lewis & C. H. Papadimitrion: Elements of Theory Of Computation (PHI)
- 3. J. Caroll and D. Long: Theory of Finite Automata (PHI)
- 4. M. Davis & Weyukur: Computability, Complexity & Languages.
- 5. M. Machtey& P. R. Young: An introduction to Genral Theory of Algorithm (Elsevier).
- 6. Zvihohavi: Switching and Finite Automata Theory (TMH).



Paper 7: Computer Architecture and Organization

Hours/Week: 4 Credits: 4

Unit-1:

Principle of computer design: Software, hardware interaction, layers in computer architecture, central processing and machine language instruction, addressing modes, instruction types, instruction set selection, instruction and execution cycle.

Unit-2:

Control Unit: Data path and control path design, microprogramming v/s hardwired control, pipelining in CPU design, RISC v/s CISC, superscalar processors.

Unit-3:

Memory subsystem: Storage technologies, memory array organization, memory hierarchy, interleaving, cache memory and virtual memory including architectural aids to implement these.

Unit-4:

Input/ Output Processing: Bus Interface, Data transfer techniques, I/O interrupts and channels,. Performance evaluation: SPECmarks, Transaction Processing Benchmarks.

- 1. Computer Architecture and Organization by Tenenbaum
- 2. Computer Architecture and Organization by J. P. Hayes.
- 3. Parallel Processing by Hwang
- 4. Computer Organization by Hamacher, Vranesic, Zaky (TMH)



Paper 8 : Computer Graphics

Hours/Week: 4 Credits: 4

Unit-1:

Introduction of computer Graphics and its applications, Overview of Graphics systems, Video display devices, Raster scan display, Raster scan systems, video controller, Raster scan display processor, Random scan display, random scan systems, color CRT monitor, Flat panel display, Interactive input devices, Logical classification of input devices, Keyboard, mouse, Trackball and spaceball, Joysticks, Image scanner, Light pens, Graphics software, Coordinates representations, Graphics functions.

Unit-2:

Line drawing algorithms, DDA, Bresenham's, Circle generating, Mid-point circle algorithm, Ellipse generating, Polygon, Scan-line polygon fill, Boundary fill.

Unit-3:

Basic transformation's, Translation, Rotation, Scaling, Matrix representation's & homogeneous coordinates, Composite transformation's, Reflection, Two dimensional viewing, Two dimensional clipping, Line, Polygon, Curve, Text. 3D-transformation, Projection, Viewing, Clipping. Spline representation, Cubic spline, Bezier curve, Bezier surfaces, Beta spline, B-spline surfaces, Bspline curve, Hidden surfaces, Hidden lines, Z-buffer.

Unit-4:

Fractal's geometryFractal generation procedure, Classification of Fractal, Fractal dimension, Fractal construction methods. Color models, XYZ, RGB, YIQ, CMY & HSV, Shading algorithms, Shading model, Illumination model, Gouraud shading, Phong shading.

Books:

- 1. Computer Graphics by M. Pauline Baker, Donald Hearn, 2 Edition PHI.
- 2. Mathematical Element for Computer Graphics By. David F. Roger., J. Alan Adams, 2nd Edition, Tata McGHill.

- 1. Principles of Interactive Computer Graphics By. William. M. Newmann. 2ndEdition Mc. Graw Hill.
- 2. Procedural Element for Computer Graphics By. David F. Roger. Mc. Graw Hill.
- 3. Computer Graphics By A.P. Godse, 2ndEditioTPPublication,
- 4. Computer Graphics By V.K. Pachghare, 2ndEdition, Laxmi Publication
- 5. Computer Graphics ByApurva Desai (PHI)



M.Sc.(Computer Science)

Semester III

Paper 9: Data Communication and Network

Hours/Week: 4 Credits: 4

Unit-1:

Introduction: Network structure and architectures and services OSI reference model.

The Physical Layer: theoretical basis for data communication, transmission media. Analog Transmission, Digital Transmission, Transmission and Switching, ISDN.

The Data Link Layer: Design issues, Error detection and correction, Elementary data link protocols, sliding window protocol, protocols performance, protocols specification and verification. Examples of the Data link layer.

Network Layer: Design issues, routing algorithms, Congestion control algorithms, Internet working, Examples of the network layer.

Unit-2:

The Transport Layer: Design issues, Connection Management.

The session layer: Design issues and remote procedure call.

The Presentation Layer: Design issues, data compression techniques, cryptography.

The Application Layer: Design issues, file transfer, access and management, virtual terminals.

Unit-3:

Network Security Fundamentals: Introduction, security Vulnerabilities and Threats, Classification of Security Services. Cryptography: Encryption principles, Conventional Encryption DES, IDEA, Algorithms, CBC, Location of Encryption Devices key Distribution.

Unit-4:

Message Digests and Checksums, Message Authentication, Message Digests, Hash Functions and SHA, CRCs. Public key Systems: RSA Diffie-Heliman, DSS, Key Management.

Intruders: Intrusion Techniques, Intrusion Detection, Authentication, Password- Based Authentication, Address- Based Authentication, Certificates, Authentication Services, Email Security, Firewalls, Design Principles, Packet Filtering, Access Control, Trusted Systems, Monitoring and Management.

Books:

- 1. Computer Networks Andrew S Tanenbum (PHI)
- 2. Network Security and Essentials: Application and standers
- 3. Willam Stalling Pearson Education.
- 4. Cryptography and network security
- 5. Willam Stalling Pearson Education.

- 1. Internet Security: Timspeed, Juanita Ellis, Digital Press Publication
- 2. Internet Security: Jan L. Harington, Morgan Kaufmann Publication
- 3. Firewall Network System: John R. Vacca, Scott R. Ellis, Digital Press
- 4. Network Algoritm, George Varghese, Morgan Kaufmann Publication
- 5. TCP/IP Addressing: Buck Graham, Morgan Kaufmann Publication
- 6. Data Communication and Networking: Behrouz A. Forouzan, TMH.



Paper 10: Software Engineering

Hours/Week: 4 Credits: 4

Unit-1:

Introduction to Software Engineering :The evolving role of software, Changing Nature of Software, Software myths.

A Generic view of process :Software engineering- A layered technology, a process framework, The Capability Maturity Model Integration (CMMI), Process patterns, process assessment, personal and team process models.

Process models: The waterfall model, Incremental process models, Evolutionary process models, The Unified process. Software Requirements: Functional and non-functional requirements, User requirements, System requirements, Interface specification, the software requirements document.

Unit-2:

Requirements engineering process :Feasibility studies, Requirements elicitation and analysis, Requirements validation, Requirements management. System models :Context Models, Behavioral models, Data models, Object models, structured methods. Modeling with UML .

Design Engineering: Design process and Design quality, Design concepts, the design model.

Creating an architectural design :Software architecture, Data design, Architectural styles and patterns, Architectural Design.

Unit-3:

Object-Oriented Design :Objects and object classes, An Object-Oriented design process, Design evolution. Performing User interface design :Golden rules, User interface analysis and design, interface analysis, interface design steps, Design evaluation.

Testing Strategies: A strategic approach to software testing, test strategies for conventional software, Black-Box and White-Box testing, Validation testing, System testing, the art of Debugging. Product metrics: Software Quality, Metrics for Analysis Model, Metrics for Design Model, Metrics for source code, Metrics for testing, Metrics for maintenance.

Unit-4:

Metrics for Process and Products: Software Measurement, Metrics for software quality.

Risk management :Reactive vs. Proactive Risk strategies, software risks, Risk identification, Risk projection, Risk refinement, RMMM, RMMM Plan.

Quality Management :Quality concepts, Software quality assurance, Software Reviews, Formal technical reviews, Statistical Software quality Assurance, Software reliability, The ISO 9000 quality standards.

Books:

- 1.Software Engineering, A practitioner's Approach- Roger S. Pressman, 6th edition.McGrawHill International Edition.
- 2. Software Engineering- Sommerville, 7th edition, Pearson education.

- 1. Software Engineering- K.K. Agarwal&Yogesh Singh, New Age International Publishers
- 2. Software Engineering an Engineering approach- James F. Peters, WitoldPedrycz, John Wiely.
- 3. Systems Analysis and Design- ShelyCashmanRosenblatt,Thomson Publications.
- 4. Software Engineering principles and practice- Waman S Jawadekar, The McGraw-Hill.



Paper 11:CE1-1(Core Elective 1) Neural Network

Hours/Week: 4 Credits: 4

Unit-1:

Introduction: Feedforward Neural Networks: Artificial Neurons, Neural Networks and Architectures: Neuron Abstraction, Neuron Signal Functions, Mathematical Preliminaries, Neural Networks Defined, Architectures: Feed forward and Feedback, Salient Properties and Application Domains of Neural Network Geometry of Binary Threshold Neurons and Their Network: Patterns Recognition and Data Classification, Convex Sets, Convex Hulls and Linear Separability, Space of Boolean Functions, Binary Neurons are pattern Dichotomizes, Non-linearly separable Problems, Capacity of a simple Threshold Logic Neuron, Revisiting the XOR Problem, Multilayer Networks.

Unit-2:

Supervised Learning I: Perceptrons and LMS: Learning and Memory, From Synapses to Behaviour: The Case of Aplysia, Learning Algorithms, Error Correction and Gradient Descent Rules, The Learning Objective for TLNs, Pattern space and Weight Space, Perceptron Learning Algorithm, Perceptron Convergence Theorem, Perceptron learning and Non-separable Sets, Handling Linearly Non-Separable sets, α -Least Mean Square Learning, MSE Error Surface and its Geometry, Steepest Descent Search with Exact Gradient Information, μ -LMS: Approximate Gradient Descent, Application of LMS to Noise Cancellation

Unit-3:

Supervised Learning II: Backpropagation and Beyond: Multilayered Network Architectures, Backpropagation Learning Algorithm, Structure Growing Algorithms, Fast Relatives of Backpropagation, Universal Function Approximation and Neural Networks, Applications of Feedforward Neural Networks, Reinforcement Learning

Unit-4:

Neural Networks: A Statistical Pattern Recognition Perspective: Introduction, Bayes Theorem, Classification Decisions With Bayes Theorem, Probabilistic Interpretation Of A Neuron Discriminant Function, Interpreting Neuron Signals As Probabilities, Multilayered Networks, Error Functions And Posterior Probabilities, Error Functions For Classification Problems

Generalization: Support Vector Machines and Radial Basis Function Networks: Learning from Examples and Generalization, Statistical Learning Theory Briefer, Support Vector Machines, Radial Basis Function Networks, Regularization Theory Route to RRBFNs, Generalized Radial Basis Function Network, Learning In RRBFNs, Image Classification Application, Other Models for Valid Generalization

Books:

- 1. Neural Network-A Classroom Approach, Satish Kumar, Tata McGraw Hill
- 2. Introduction to neural networks using MATLAB 6.0 by Sivanandam, S Sumathi, S N Deepa, Tata Mcgraw Hill

- 1. Neural networks A comprehensive foundations, Simon Hhaykin, Pearson Education 2nd edition 2004
- 2. Artificial neural networks -B. Yegnanarayana, Prentice Hall of India P Ltd 2005.
- 3. Neural networks in Computer intelligence, Li Min Fu, TMH 2003.
- 4. Neural networks James A Freeman David M S kapura, Pearson education 2004.



Paper 11: CE1-2 (Core Elective 1) Multimedia Technologies

Hours/Week: 4 Credits: 4

Unit-1:

Fundamental concepts in Text and Image: Multimedia and hypermedia, world wide web, overview of multimedia software tools. Graphics and image data representation graphics/image data types, file formats, Color in image and video: color science, color models in images, color models in video. Fundamental concepts in video and digital audio: Types of video signals, analog video, digital video, digitization of sound, MIDI, quantization and transmission of audio.

Unit-2:

Action Script I :ActionScript Features, Object-Oriented ActionScript, Datatypes and Type Checking, Classes, Authoring an ActionScript Class Action Script II :Inheritance, Authoring an ActionScript 2.0 Subclass, Interfaces, Packages, Exceptions.

Unit-3:

Application Development :An OOP Application Frame work, Using Components with ActionScriptMovieClip Subclasses.

Multimedia data compression:Lossless compression algorithm: Run-Length Coding, Variable Length Coding, Dictionary Based Coding, Arithmetic Coding, Lossless Image Compression, Lossy compression algorithm: Quantization, Transform Coding, Wavelet-Based Coding, EmbeddedZerotree of Wavelet Coefficients Set Partitioning in Hierarchical Trees (SPIHT).

Unit-4:

Basic Video Compression Techniques: Introduction to video compression, video compression based on motion compensation, search for motion vectors, MPEG, Basic Audio Compression Techniques. Multimedia Networks: Basics of Multimedia Networks, Multimedia Network Communications and Applications: Quality of Multimedia Data Transmission, Multimedia over IP, Multimedia over ATM

Networks, Transport of MPEG-4, Media-on-Demand(MOD).

Books:

- 1. Fudamentals of Multimedia by Ze-Nian Li and Mark S. Drew PHI/Pearson Education.
- 2. Essentials ActionScript 2.0, Colin Moock, SPD O, REILLY.

- 1. Digital Multimedia, Nigel chapman and jenny chapman, Wiley-Dreamtech
- 2. Macromedia Flash MX Professional 2004 Unleashed, Pearson.
- 3. Multimedia and communications Technology, Steve Heath, Elsevier(Focal Press).
- 4. Multimedia Applications, Steinmetz, Nahrstedt, Springer.
- 5. Multimedia Basics by Weixel Thomson.
- 6. Multimedia Technology and Applications, David Hilman ,Galgotia.



Paper 11: CE1-3 (Core Elective1) ASP.Net

Hours/Week: 4 Credits: 4

Unit-1:

ASP.NET programming model:Introduction, event driven programming over http, http protocol, structure of ASP.NET page, ASP.NET component model, ASP.NET Provider model, Anatomy of ASP.Net Page: Invoking page, Page class, Page Life cycle.

ASP.NET Core Server controls:Generalities of Server Controls, Properties, events and methods of Control class, HTML controls:Generalities of HTML controls, HTML Containers, HTML input controls.

Unit-2:

Web controls:Generalities of Web Control, core web control, misc web control, Validation controls: Generalities of validation controls, Gallery of controls, Programming with Web forms; HtmlFrom Class, Multiple forms, cross page postings, Page errors, Page Personalization.

Ritch Page Composition: Working with master page, working with themes, working with wizards, ADO.NET data Providers, Connecting to data sources: connection strings, connection pooling, Executing commands: ADO Data Readers, Data Adapters, working with transactions, procedures etc. Data container objects: Data sets, Data tables, Data Relations, Data binding models: expressions and components.

Unit-3:

Creating bindable grid of data:DataGrid Control, GridView control, Managing list of records: ListView control and Managing views of records: DetailView Control, FromView Control, Initialization of Application: HttpApplicationClass, Application module, methods and events of HttpApplication Class, The global.asax file, HttpContext Class, Server Object, HttpResponse Object, HttpRequest Object.

Unit-4:

ASP.NET state management: Application state, Session State: working with session state, customizing session state, view state of page. ASP.NET caching: Caching Application data, the Cache Class, ASP.NET Security: Using Form authentication, membership and role management API, Security related controls, AJAX Enabled web services: Web services as application specific services, remote call via web services,

- 1. Programming with Microsoft ASP.NET 3.5 by Dino Esposito, Microsoft Press
- 2. Programming with Microsoft ASP.NET 4.0 by Microsoft Press
- 3. The Complete Reference ASP.NET by MacDonald(TMH)



Paper 12:FC1-1 (Foundation1)

Operating System Concepts

Hours/Week: 4 Credits: 4

Unit I - Introduction

OS As An Extended Machine, OS As An Resource Manager, History Of OS & Its Generation, Mainframe OS, Server OS, Multiprocessor OS, Personal Computer OS, Real Time OS, Embedded OS, Smart Card OS, Processor, Memory, I/O Devices, Buses, Processes, Deadlocks, Memory Management, I/O, Files, Security, The Shell, System Calls, OS Structure.

Unit II - Processes& Threads

Process Model, Process Creation, Process Termination, Process Hierarchies, Process State Implementation Of Processes, Thread Model, Thread Model, Thread Usage, Implementing Threads In User Space & Kernel, Hybrid Implementation, Scheduler Activations, Pop-Up Threads, Interprocess Communication, Scheduling.

Unit III - File System Concepts in OS.

File Name, File Structure, File Types, File Access, File Attributes, File Operations Memory Mapped Files, Single Level Directory System, Two Level Directory System, Hierarchical Directory System, Path Name, Directory Operations, File System Layout, Implementing Files, Implementing Directories, Shared Files, CD-Rom File System, Ms-Dos File System, Windows File System, Unix File System.

Unit IV

Introduction to Disk Operating System (DOS) - File types, Directory Structure, Booting - Warm and Cold Booting, Types of DOS commands (Internal and External), Directory commands, Commands related to file management, General commands, batch commands, wild card characters & its use.

Introduction to windows Operating System Advantages of windows operating system, GUI, use of help features, changing system settings, system tools, use of run command, setting peripherals, drivers, editing graphics in windows, new features in windows XP/Vista versions.

Introduction to UNIX Operating System

History of UNIX File System: Pdp-11 UNIX, Portable UNIX, Berkeley Unix, Standard Unix, Linux. Overview Of Unix, Processes In Unix Memory Management In Unix, I/O In Unix, Security In Unix.

- 1. Modern Operating System By Andrew Tannenbaum, PHI Publication.
- 2. UNIX the Complete Book a Guide for the professional By Jason Manger, Galgotia Publication
- 3. Red Hat Linux 7 By Brain Proffitt, PHI Publication.
- 4. Dos/Unix & Windows: I.T. Today (Encyclopedia) By S. Jaiswal
- 5. Operating System Concept: Sillberschatz Galvin
- 6. MSDOS: Manual



Paper 12: FC1-2 (Foundation1)

PRINCIPLES OF MANAGEMENT

Hours/Week: 4 Credits: 4

Unit I: Introduction - Nature, function, definition and importance of management, Definition, nature, purpose and scope of management, Functions of a manager, an overview of planning, organizing, staffing leading and controlling. Is management a science or art? Development of Management Thought - Scientific management; Contribution of Taylor, Fayol, Mary Follet, Elton Mayo; Hawthorne experiments, Contingency approach, Indian heritage in production and consumption. Management and administration, Management as a profession, Professionalism of management in India, Management ethics and management culture, Skills required of manager, Classification of skills, Methods of skills development

Unit II: Management Planning - Concept of planning, objectives, Nature, Types of plan, Stages involved in planning, Characteristics of a good plan, Importance, Limitations of planning, Making planning effective, Strategic planning in Indian Industry, MBO. Decision Making - Concept, characteristics of decisions, Types of decisions, Steps Involved in decision making, Importance of decision making, Methods of decision making, Committee Decision Making.

Unit III:Organisation - Concepts, Principle of organization, Importance, Features of good organization structure, Types of Organisation structure. Authority, Responsibilities and Accountability, Delegation of Authority Barriers to effective delegation, Span of control.Coordination & Direction Concept - Importance and need for coordination, Principles of coordination, Methods of achieving effective coordination; Meaning of direction, Importance and Principles of direction, Characteristics of good directives.

Unit IV: Control - Concept, planning-control relationship, process of control -setting objectives, establishing standards, measuring performance, correcting deviations. Brief review of Traditional Techniques & Modern Techniques of Control; Human response to control; Dimensions or Types of Control - (a) Feed forward control (b) Concurrent Control (Real Time Information & Control), (c) Feedback Control v) Techniques of Control.

- 1. Essentials of Management, Harold Koontz & Heinz, Weihrich, 5th Tata McGraw Hill
- 2. Management Stoner, Freeman, Gilbert Jr., 6th, Prentice Hall
- 3. Management (A Global Perspective), Heinz Weihrich&Harnold Koontz, 10th Tata McGraw Hill
- 4. A Dictionary of Business 3ed. By Elizabeth Martin Oxford
- 5. Fundamentals of Management, Robins ,3rd Pearson Education Asia
- 6. Management, 6e, Stoner, Pearson Education Asia



Paper 12: FC1-3 (Foundation1)

E-BUSINESS

Hours/Week: 4 Credits: 4

UNIT- I: Introduction-Definition of E-commerce, Unique Features of E-commerce Technology: Ubiquity, Global Reach, Universal Standards, Richness, Interactivity, Information Density, Personalization/Customization, Social Technology: User Content Generation and Social Networking, Web 2.0, Play My version; Growth of the Internet and the Web, Origins and Growth of E-commerce, Insight on Technology: Spider Webs, Bow Ties, Scale-Free Networks and Deep Web Technology and E-commerce in Perspective

E-Business Technologies-The Internet: Key Technology Concepts: Packet Switching, Transmission Control Protocol/Internet Protocol (TCP/IP), IP Addresses, Domain Names, DNS, and URLs, Client/Server Computing The Internet Today: The Internet Backbone, Internet Exchange Points, Campus Area Networks (CANs), Internet Service Providers, Intranets and Extranets, Who Govern the Internet? Building an E-commerce Website: Planning: The Systems Development Life Cycle, Systems Analysis/Planning: Identify Business Objectives, System Functionality and Information Requirements., System Design: Hardware and Software Platforms, Building Your-Own versus Outsourcing, Host your Own versus Outsourcing,

UNIT – II: E-Business Models- Eight Key Elements of a Business Model: Value Proposition, Revenue Model, Market Opportunity, Competitive Environment, Competitive Advantage, Market Strategy, Major Business to-Consumer (B2C) Business Models: Portal, E-tailer, Insight on Technology: Search, ads and Apps: The future for Google, (and Microsoft), Content Provider, Transaction Broker, Market Creator, Service Provider, Community Provider, Major Business-to-business (B2B) Business Model: E-distributor, EProcurement, Exchanges, Insight on Business: Onvia Evolves, Industry Consortia, Private Industrial Networks, Business Models in Emerging E-commerce Areas: Consumer-toconsumer (C2C) Business Models, Peer-to-peer (P2P) Business Models, M-commerce Business Models, E-Commerce Enablers: The Gold Rush Models, Insight on Society: Is Privacy Possible in a Wireless World?, How the Internet and the Web Change Business: Strategy, Structure, and Process, Industry structure, Industry Value Chains, Firm Value Chains, Firm Value Webs, Business Strategy.

UNIT- III: Back Office Automatics For E-Business - Basics of Enterprise Resource Planning, ERP Decision, Enterprise Architecture Planning, ERP Implementation, ERP Architecture and Toolkit Evolution, Implementation Supply Chain Management And EFulfillment: The Basics of Supply Chain Management, Internet-Enabled SCM, E-Supply Chain Fusion, Management Issues in e-supply Chain Fusion, The continuing Evolution of eSupply Chains, A Roadmap for Managers, Demystifying E-Procurement: Buy-Side, SellSide, Net Markets And Trading Exchanges: Evolution of e-Procurement Models, Evolution of Procurement Processes, e- Procurement Infrastructure Integrating Ordering, Fulfillment, and payment, E-Procurement, Analysis and Administration Applications, Marketplace Enables, A Roadmap for e-Procurement Managers.

UNIT-IV: Moving To E-Business - Spotting E-Business Trends, Trends Driving E-Business, Customer-Oriented Trends, E- Service Trends, Organizational Trends, Employee Megatrends, Enterprise



Technology, Trends, General Technology Trends, What These 20 Trends Have In Common, Digitizing The Business: E-Business Patterns, E-Business Patterns: The Structural Foundation, The E-Channel Pattern, The Click-And-Brick Pattern, The EPortal Pattern, The E- Market Maker Pattern, The Pure-E—Digital Products Pattern, Thinking E-Business Design: More Than Technology, The Race To Create Novel E-Business Designs, Step: 1: Self — Diagnosis, Step: 2: Reverse The Value Chain, Step: 3: Choose A Focus, Step 4: Execute Flawlessly, Lessons From E-Business Design.

Ethical, Social And Political Issues -Understanding Ethical, Social, and Political Issues in E-commerce, A Model for organizing the issues, Basic Ethical Concepts: Responsibility, Accountability, and Liability, Analyzing Ethical Dilemmas, Candidate Ethical Principles, Privacy and Information Rights, Information Collected at Ecommerce Sites, Profiling and Behaviourial Targeting, The Internet and Government Invasions of Privacy:, Ecommerce Surveillance, Legal Protections, Informed Consent, Intellectual Property Rights, Types of Intellectual Property Protection, Copyright: The Problem of Perfect Copies and Encryption, Patents: Business Methods and Processes, Trademarks: Online Infringement and Dilution, Challenge: Balancing the Protection of Property with other values.

- 1. E-Business & E-Commerce for Managers, Deitel, Pearson Education
- 2. Michael Allen's E-Learning Library: Creating Successful E-Learning: A Rapid System For Getting It Right First Time, Every Time (Michael Allen's E-Library) by Michael W. Allen
- 3. E-Business AmanagementPerspective,Reynolds, Oxford Higher Education
- 4. Harvard Business Review on Corporate Governance (Harvard Business Review Paperback Series) by Walter J. Salmon, Jay William Lorsch, Gordon Donaldson, and John Pound
- 5. E-Commerce: Business, Technology, Society (3rd Edition) by Kenneth Laudon and Carol Traver
- 6. Knowledge Management by Carl Frappaolo



Paper 12: CDC1-1 (Core Subject Centric1)

Mobile Computing

Hours/Week: 4 Credits: 4

Unit-1:

Mobile Communications: An Overview:Mobile Communication, Mobile Computing, Mobile Computing Architecture, Mobile Devices, Mobile System Networks, Data Dissemination, Mobility Management, Security Mobile Devices and Systems:Mobile Phones, Digital Music Players, Handheld Pocket Computers, Handheld Devices: Operating Systems, Smart Systems, Limitations of Mobile Devices, Automotive Systems GSM and Similar Architectures:GSM-Services and System, Architecture, Radio Interfaces, Protocols, Localization, Calling Handover, Security, New Data Services, General Packet Radio Service, High-speed Circuit Switched Data, DECT

Unit-2:

Wireless Medium Access Control and CDMA based Communication: Medium Access Control, Introduction to CDMA-based Systems, Spread Spectrum in CDMA Systems, Coding Methods in CDMA, IS-95 cdma One System, IMT- 20 0 0, i - m o d e , O F D M , Mobile IP Network Layer: IP and Mobile IP Network Layers, Packet Delivery and Handover Management, Location Management, Registration, Tunnelling and Encapsulation Route Optimization, Dynamic Host Configuration Protocol, Mobile Transport Layer, Conventional TCP/IP Transport, Layer Protocols, Indirect TCP, Snooping TCP, Mobile TCP, Other Methods of TCP-layer Transmission for Mobile Networks, TCP Over 2.5G/3G Mobile Networks

Unit-3:

Databases: Database Hoarding Techniques, Data Caching, Client-Server Computing and Adaptation, Transactional Models, Query Processing, Data Recovery Process, Issues relating to Quality of Service, Data Dissemination and Broadcasting Systems: Communication Asymmetry, Classification of Data-Delivery Mechanisms, Data Dissemination Broadcast Models, Selective Tuning and Indexing Techniques, Digital Audio Broadcasting, Digital Video Broadcasting, Data Synchronization in Mobile Computing Systems: Synchronization, Synchronization Software for Mobile Devices, Synchronization Protocols, SyncML Synchronization Language for Mobile Computing, Sync4J (Funambol), Synchronized Multimedia, Markup Language (SMIL)

Unit-4:

Mobile Devices Server and Management: Mobile Agent, Application Server, Gateways, Portals, Service Discovery, Device Management, Mobile File Systems, Security, Mobile Adhoc and Sensor Networks: Introduction to Mobile Ad-hoc Network, MANET, Wireless Sensor Networks, Applications Wireless LAN, Mobile Internet Connectivity, and Personal Area Network: Wireless LAN (WiFi) Architecture and Protocol Layers, WAP 1.1 and WAP 2.0, Architectures, XHTML-MP (Extensible Hypertext Markup Language Mobile Profile), Bluetooth-enabled Devices Network, Layers in Bluetooth Protocol, Security in Bluetooth Protocol, IrDA, ZigBeeMobile Application Languages XML, Java, J2ME, and Java Card: Introduction, XML, JAVA, Java 2 Micro Edition (J2ME), JavaCard, Mobile Operating Systems: Operating System PalmOS, Windows CE, Symbian OS, Linux for Mobile Devices 530



Books:

1. Mobile Computing, Raj Kamal, Oxford University Press

- 1. Mobile Communications Jochen Schiller, Addison-Wesley.
- 2. Handbook of Wireless Networks and Mobile Computing, Stojmenovic and Cacute, Wiley,
- 3. Mobile Computing Principles: Designing and Developing Mobile
- 4. Applications with UML and XML, Reza Behravanfar, Cambridge University Press,



Paper 12: CDC1-2 (Core Subject Centric1)

DIGITAL & CYBER FORENSICS

Hours/Week: 4 Credits: 4

Unit I: Recent amendments in IT Act, internet & web technologies, web hosting and development, attributes in cyberspace and legal framework of cyberspace, hacking, virus, obscenity, pornography, programme manipulation, Copyright, Patent, software piracy, intellectual property rights, trademark, domain disputes, and computer security, etc., Encryption and Decryption methods. Search and seizures of evidence. Investigation of cyber crimes and tools for analysis.

Unit II: Information security: Domains, Common Attacks, Impact of Security Breaches. Protecting Critical Systems (Information Risk Management, Risk Analysis etc) Information Security in Depth Physical security (Data security Systems and network security) Program Security: Secure programs, Non-malicious program errors, Viruses and other malicious code, Targeted malicious code, Controls against program threats File protection mechanism, Authentication: Authentication basics, Password, Challenge response, Biometrics. Network Security: Threats in networks, Network security control, Firewalls, Intrusion detection systems, Secure e-mail, Networks and cryptography, Example protocols: PEM, SSL, IPsec. Principles of network forensics, Attack Traceback and attributes, Critical Needs Analysis. IDS: Network based Intrusion Detection and Prevention Systems, Host based Intrusion Previnsion System. Cloud Computing-Its Forensic and Security Aspects.

Unit III: Cyber Crime Investigations: Where Evidence Resides on Windows systems, Conducting a Windows investigation, File Auditing and Theft of information, Handling the Departing Employee, Steps in a Unix Investigation, Reviewing Pertinent Logs, Performing Keywords Searches, Reviewing Relevant Files, Identifying Unauthorized User Accounts or Groups, Identifying Rogue Processes, Checking for Unauthorized Access Points, Analyzing Trust Relationships, Detecting Trojan Loadable Kernel Models. Finding Network based Evidence, Generating Session data with TCP Trace, Reassembling sessions using TCP flow and Ethereal.

Unit IV: Open source tools for digital forensics and Registry Forensic- Open source, Open source examination platform, preparing the examination system, using LINUX and Windows as host, Study of Sleuth Kit: Installing Sleuth Kit, Sleuth Kit tools (Volume layer tools, File system Layer tools, Data unit Layer tools, Metadata Layer Tools) Registry Analysis, Understanding Windows Registry and Registry Structure.

- 1. C. P. Pfleeger, and S. L. Pfleeger, "Security in Computing", Pearson Education.
- 2. Computer Forensic Investigating Data and Image Files, EC Council Press
- 3. Robert Jones, Internet Forensics Using Digital Evidence to Solve Computer Crimes, O'Reilly Media Publication
- 4. Forouzan Data Communication and Networking McGraw Hill
- 5. Stallings, "Cryptography And Network Security: Principles and practice"
- 6. Kevin Mandia, Chris Prosise and Matt Pepe, Incident response and computer forensics, McGraw Hill Publication
- 7. Cory Altheide, Harlan Carvey, Digital Forensics with Open source Tools, Syngress Publication
- 8. Michael E Whitman and Herbert J Mattord, "Principles of Information Security", Vikas Publishing House, New Delhi, 2003
- 9. Micki Krause, Harold F. Tipton, "Handbook of Information Security Management", Vol 1-3 CRC



Press LLC, 2004.

- 10. Stuart McClure, Joel Scrambray, George Kurtz, "Hacking Exposed", Tata McGrawHill, 2003
- 11. Matt Bishop, "Computer Security Art and Science", Pearson/PHI, 2002.
- 12. Advances in digital forensic VI by kampui chow, sujeetshenoi
- 13. Malware forensic by Cameron malin
- 14. Windows registry forensic by Harlan carvey,
- 15. Digital forensic for network internet and cloud computing clint garrison
- 16. Indian Patents Law and Procedure, D. P. Mittal, 2002, New Delhi, Allied Services (P) Ltd. 1999
- 17. Patent Act, 1970.
- 18. Copyright Act, 1957.
- 19. Trade Mark Act, 1999.
- 20. Information Technology Act, 2000.
- 21. Linux kernel development, paperback
- 22. Beginning linux, paperback 77. Linux command line and shell script, paperback



M.Sc.(Computer Science)

Semester IV

Paper 13: Data Mining

Hours/Week: 4 Credits: 4

Unit-1:

Introduction to Data Mining: Why Mine Data? Commercial Viewpoint, Scientific Viewpoint Motivation, Definitions, Origins of Data Mining, Data Mining Tasks, Classification, Clustering, Association Rule Discovery, Sequential Pattern Discovery, Regression, Challenges of Data Mining, Data Mining-Data: What is Data? Attribute Values, Measurement of Length, Types and Properties of Attributes, Discrete and Continuous Attributes, Types of data sets, Data Quality, Data Preprocessing, Aggregation, Sampling, Dimensionality Reduction, Feature subset selection, Feature creation, Discretization and Binarization, Attribute Transformation, Density.

Unit-2:

Data Mining: Exploring Data: Data Exploration Techniques, Summary Statistics, Frequency and Mode, Percentiles, Measures of Location: Mean and Median, Measures of Spread: Range and Variance, Visualization, Representation, Arrangement, Selection, Visualization Techniques: Histograms, , Box Plots, Scatter Plots, Contour Plots, Matrix Plots, Parallel Coordinates, Other Visualization Techniques, OLAP: OLAP Operations, Data Mining Classification: Bask Concepts, Decision Trees, and Model Evaluation: Classification: Definition, Classification Techniques, Tree Induction, Measures of Node Impurity, Practical Issues of Classification, ROC curve, Confidence Interval for Accuracy, Comparing Performance of Two Models, Comparing Performance of Two Algorithms.

Unit-3:

Data Mining Classification: Alternative Techniques: Rule-Based Classifier, Rule Ordering Schemes, Building Classification Rules, Instance-Based Classifiers, Nearest Neighbor Classifiers, Bayes Classifier, Naive Bayes Classifier, Artificial Neural Networks (ANN), Support Vector Machines. Data Mining Association Analysis: Basic Concepts and Algorithms: Association Rule Mining, Frequent Itemset Generation, Association Rule Discovery: Hash tree, Factors Affecting Complexity, Maximal Frequent Horible Closed Itemset, Alternative Methods for Frequent Itemset Generation, FPgrowth Algorithm, Tree Projection, Rule Generation, Pattern Evaluation, Statistical Independence, Properties of A Good Measure, Support-based Pruning, Subjective Interestingness Measure.

Unit-4:

Data Mining Cluster Analysis: Basic Concepts and Algorithms: Applications of Cluster Analysis, Types of Clusters, Clustering Algorithms: 'K-means and its variants, Hierarchical clustering, Density based clustering. Graph-Based Clustering, Limitations of Current Merging Schemes, Characteristics of Spatial Data Sets, Shared Near Neighbor Approach, ROCK (RObust Clustering using links), Jarvis Patrick Clustering, SNN Clustering Algorithm, Data Mining Anomaly Detection: Anomaly jOutlier Detection, Importance, Anomaly Detection Schemes, Density-based: LOF approach

Books:

- 1. Introduction to Data Mining by Tan, Steinbach, Kumar.
- 2. Data Mining: Concepts and Techniques by Jiawei Han, MichelineKamber, Morgan Kaufmann

- 1. Data Mining: Practical Machine Learning Tools and Techniques by Ian H. Witten and Eibe Frank, Morgan Kaufmann, 2nd Edition (2005).
- 2. Principles of Data Mining: David Hand, HeikkiMannila&Padhraic Smyth, PHP Publication.



Paper 14: Artificial Intelligence & Expert System

Hours/Week: 4 Credits: 4

Unit-1:

AI problems, AI Techniques, Tic-tac-toe, Question Answering, Problem as a state space search, A water jug problem, production system, Control strategies, Heuristic Search, Problem Characteristics, Production system characteristics, Design of search programs

AI Search techniques: Depth-first, Breadth-first search, Generate-and-test, Hill climbing, Best-first search, Constraint satisfaction, Mean-ends-analysis, A* Algorithm, AO* algorithm.

Unit-2:

Knowledge Representation:- Representations and mappings, Knowledge Representations, Issues in Knowledge Representation, Predicate Logic:- Representing Instance and Isa Relationships, Computable Functions and predicates, Resolution, Natural Deduction, Logc programming, Forward versus Backward Reasoning, Matching, Control knowledge, Expert System.

Unit-3:

Games playing: Minimax search procedure, adding alpha-beta cutoffs, additional refinements, Planning: Component of a planning system, Goal task planning, Nonlinear planning, Hierarchical Planning.

Unit-4:

Understanding, Understanding as Constraint satisfaction, Natural Language Processing, Syntactic Processing, Unification grammars, Semantic Analysis, Introduction to pattern recognition, Parallel and Distributed AI, Psychological Modeling, Distributed Reasoning Systems,

Books:

- 1. Artificial Intelligence by Elaine Rich, Mcgrawhill Inc.
- 2. Artificial Intelligence and Expert Systems Jankiraman, Sarukes (M)

- 1. Expert System: Theory and Practice-Ermine (PHI)
- 2. Lisp Programming RajeoSangal (TMH)
- 3. Rule based Expert System M.Sasikumar (Narosa)
- 4. Artificial intelligence Russell-Pearson- Ist Text book.
- 5. Principles of AI- Nils Nilson
- 6. A.I. by R.J.Winston Pearson
- 7. ES: Theory and Practice- Ermine PHI.
- 8. Int. ti Expert System Jackson Pearson.



Paper 15: CE2-1 (Core Elective 2)

Design and Analysis of Algorithm

Hours/Week: 4 Credits: 4

Unit-1:

Elementary Algorithmics: Introduction- Problems and Instances- The Efficiency of algorithms- Average and worst case Analysis. Asymptotic Notation: A notation for the order of – Other asymptotic notation- Conditional asymptotic notation- Asymptotic notation with several parameters- Operations on asymptotic notation.

Analysis of Algorithms: Introduction- Analyzing control structures- Average case analysis- Amortized Analysis- Solving recurrences.

Unit-2:

Greedy Algorithms: Making change- General Characteristics of Greedy algorithms- Minimum spanning trees and shortest paths- Knapsack Problems- Scheduling.

Divide and Conquer: Introduction- Multiplying large numbers- The general template- binary search-sorting- Finding the median- Matrix multiplication- Introduction to cryptography.

Unit-3:

Dynamic Programming: The Principle of Optimality- making change the knapsack problem- shortest paths- Chained matrix multiplication- approaches using recursion- Memory functions.

Unit-4:

Back tracking & Brach Bound: Traversing trees- Depth first search of directed and ndirected graph-Breadth first search- Back tracking- Branch and bound- The minimax principle, Introduction to NP-Completeness; Classes P and NP- Polynomial reductions- NP- Complete Problems NP- Hard problems-Non- Deterministic algorithms.

Books:

1. Fundamentals of Algorithms - Gilles Brassard & Paul Brately. Prentice-Hall (India)Ltd.

- 1. Fundamentals of Computer Algorithms by Ellis Horowitz &SartajSahani. Galgotia Publication.
- 2. Computer Algorithms: Introduction to Design & Analysis. Sara Baase& Alien Van Gelder. Addison Wesley Publishing Company.



Paper 15: CE2-2 (Core Elective 2) Embedded System

Hours/Week: 4 Credits: 4

Unit-1:

Introduction to Embedded Systems: Embedded Systems, Processor Embedded into a System, Embedded Hardware Units and Devices in a System, Embedded Software in a System, Examples of Embedded Systems, Embedded Systems, Embedded System-on-chip (Soc) and Use of VLSI Circuit Design Technology, Complex Systems Design and Processors, Design Process in Embedded System, Formalization of System Design, Design Process and Design Examples, Classification of Embedded Systems, Skills Required for an Embedded System Designer 8051 and Advanced Processor Architectures, Memory Organization and Realworld Interfacing:

8051 architecture, Real World Interfacing, Introduction to Advanced Architectures, Processor and Memory Organization, Instruction-Level Parallelism, Performance Metrics, Memory-Types, Memory-Maps and Addresses, Processor Selection, Memory Selection, Devices and Communication Buses for Devices Network: Types and Examples, Serial Communication

Devices, Parallel Device Ports, Sophisticated Interfacing Features in Device Ports, Wireless Devices, Timer and Counting Devices, Watchdog Timer, Real Time Clock, Networked Embedded Systems, Serial Bus Communication Protocols, Parallel Bus Device Protocols-Parallel Communication Network Using ISA, PCI, PCI-X and Advanced Buses, Internet Enabled Systems-Network Protocols, Wireless and Mobile System Protocols

Unit-2:

Device Drivers and Interrupts Service Mechanism:Programmed-I/O Busy-wait Approach without Interrupt Service Mechanism, ISR Concept, Interrupt Sources, Interrupt Servicing (Handling) Mechanism, Multiple Interrupts, Context and the Periods for Context Switching, Interrupt Latency and Deadline, Classification of Processors Interrupt Service Mechanism from Context-Saving Angle, Direct Memory Access, Device Driver Programming,

Programming Concepts and Embedded Programming in C, C++ and Java: Software Programming in Assembly Language (ALP) and in High-Level Language 'C' 235, C Program Elements: Header and Source Files and Preprocessor Directives, Program Elements:

Macros and Functions, Program Elements: Data Types, Data Structures, Modifiers, Statements, Loops and Pointers, Object-Oriented Programming, Embedded Programming in C++, Embedded Programming in Java,

Program Modeling Concepts:Program Models, DFG Models, State Machine Programming Models for Event-controlled Program Flow, Modeling of Multiprocessor Systems, UML Modelling

Unit-3:

Interprocess Communication and Synchronization of Processes, Threads and Tasks:Multiple Processes in an Application, Multiple Threads in an Application, Tasks, Task States, Task and Data, Clearcut Distinction between Functions, ISRS and Tasks by their Characteristics, Concept of Semaphores, Shared Data, Interprocess Communication, Signal Function, Semaphore Functions, Message Queue Functions, Mailbox Functions, Pipe Functions, Socket Functions, RPC Functions,

Real Time Operating Systems: OS Services, Process Management, Timer Functions, Event Functions,



Memory Management, Device, File and 10 Subsystems Management, Interrupt Routines in RTOS Environment and Handling of Interrupt Source Calls, Real-time Operating Systems, Basic Design Using an RTOS, Rtos Task Scheduling Models, Interrupt Latency and Response of the Tasks as Performance Metrics, OS Security Issues,

Unit-4:

Real time Operating System ProgrammingI:

MicrodOS-II and VxWorks, Basic Functions and Types of RTOSES, RTOS mCOS-II, RTOS VxWorks,

Realtime Operating System ProgrammingII:

Windows CE, OSEK and Real-time Linux Functions, Windows CE, OSEK, Linux 2.6.x and RTLinux, Design Examples and Case Studies of Program Modeling and Programming with RTOS 1: Case Study of Embedded System Design and Coding for an Automatic, Chocolate Vending Machine (ACYM) Using Mucos RTOS, Case Study of Digital Camera Hardware and Sofware Architecture, Case Study of Coding for Sending Application Layer Byte Streams on a TCPIIP Network Using RTOS Vxworks Design Examples and Case Studies of Program Modeling and Programming with RTOS 2:

Case Study of Communication Between Orchestra Robots, Embedded Systems in Automobile, Case Study of an Embedded System for an Adaptive Cruise Control (ACC) System in a Car, Case Study of an Embedded System for a Smart Card, Case Study of a Mobile Phone Software for Key Inputs,

Embedded Software Development Process and Tools:Introduction to Embedded Software Development Process and Tools, Host and Target Machines, Linking and Locating Software, Getting Embedded Software into the Target System, Issues in Hardware-Software Design and Co-design,

Testing, Simulation and Debugging Techniques and Tools:Testing on Host Machine: Simulators, Laboratory Tools

Books:

1. Embedded Systems: Architecture, Programming and Design, Raj Kamal, McGraw Hill

- 1. Embedded System Design" Frank Vahid&TonyGivargis; John Wiley &sons, Inc.
- 2. Real Time Systems and software" Alan C. Shaw; John Wiley & Sons Inc
- 3. Fundamentals of embedded Software", Daniel W. Lewis, Pearson
- 4. Real time Systems", J. W. S. Liu, Pearson
- 5. Embedded Realtime System Programming", S. V. Iyer and P. Gupta, TMH
- 6. An Embedded System Primer" David E. Simon; Addison-Wesley Pub
- 7. Embedded System Design" Steve Heath; Butterworth-Heinemann Pub.
- 8. Embedded System Computer Architecture" Graham Wilson, Butterworth-Heinemann
- 9. Introduction to Embedded Systems by Shibu K V (TMH)



Paper 15: CE2-3 (Core Elective 2) Pattern Recognition

Hours/Week: 4 Credits: 4

Unit-1:

Introduction to Pattern Recognition, Bayesian decision theory: Classifiers, Discriminant functions, Decision surfaces, Normal density and Discriminant functions, discrete features

Unit-2:

Maximum Likelihood and Bayesian Estimation: Parameter estimation methods, MaximumLikelihood estimation, Bayesian estimation, Bayesian Parameter Estimation, Gaussian Case, General Theory, Problem of Dimensionality, Accuracy, Dimension, and Training Sample Size, ComputationalComplexity and Overfitting, Component Analysis and Discriminants, Principal Component Analysis (PCA), Expectation Maximization (EM), Hidden Markov models for sequential pattern classification, First-Order Markov Models, First-Order Hidden Markov Models, Hidden Markov Model Computation, Evaluation, Decoding and Learning.

Unit-3:

Non-parametric: Density estimation, Parzen-window method, Probabilistic Neural Networks (PNNs), KearestNeighbour, Estimation and rules, Nearest Neighbour and Fuzzy Classification. Linear Discriminant function based classifiers: Perceptron, Linear Programming Algorithm, Support Vector Machines (SVM)

Unit-4:

Multilayer Neural Network: Feed Forward Classification, Back Propagation Algorithm, Error Surface Stochastic Data: Stochastic search, Boltzmann Learning, Evolutionary method and Genetic Programming.Non-metric methods for pattern classification: Decision trees, Classification and Regression Trees (CART) and other tree methods, String recognition and Rule Based method. Unsupervised learning and clustering: Mixture Densities and Identifiability, Maximum Likelihood estimation, Application Normal Mixture, Unsupervised Bayesian Learning, Data Description and Clustering, Hierarchical Clustering, Graph theory method, Problem of validity, Component analysis

Books:

1. R.O.Duda, P.E.Hart and D.G.Stork, "Pattern Classification 2nd Edition", John Wiley, 2007 2. 2. Christopher M. Bishop, "Neural Network for Pattern Recognition", Oxford Ohio Press.

- 1. E. Gose, R. Johansonbargh, "Pattern Recognition and Image Analysis", PHI
- 2. EthenAlpaydin, "Introduction to Machine Learning", PHI
- 3. SatishKumar, "Neural Network- A Classroom Approach", McGraw Hill.
- 4. Dr. Rao&Rao, Neural Network & Fuzzy Logic
- 5. S. S. Theodoridis and K. Koutroumbas, "Pattern Recognition", 4th Ed., Academic Press,
- 6. C.M. Bishop, "Pattern Recognition and Machine Learning", Springer, 2006
- 7. RajjanShinghal: Pattern Reognition (TMH)



Paper 16: FC2-1 (Foundation 2) Advances in Information Technology

Hours/Week: 4 Credits: 4

Unit I:

Software and programming languages. Introduction, The Software: Software types, Systems Software, Application Software, Types of Programming Languages. Characteristics of good programming language, Development of programming languages-machine language, assembly language, high level language. Introduction to Microsoft Office, working with MS Word, MS Excel, MS Power point, Data Base, Data Base Management System

Unit II:

Computer communication, need for networks, forms of data communication – analog, digital; data transmission modes, data transmission media (Twisted pair, co-axial, Fibre Optic, Microwave, Satellite communication), Bandwidth, Protocols, modems, Multiplexing, Types of network-, LAN, WAN, MAN, Network topology, types of topologies, advantages & limitations.

Unit III:

Concept of E-Commerce and Internet. Brief history and development of internet, WWW, Internet architecture – servers, browsers, URL; service providers – shell account, TCP/IP internet services and Internet applications, Intranet, Extranet, Virus, Types of Viruses, Anti-Virus, Firewall and Anti-Spy ware Utilities, Open Source Software.

Unit IV:

Current Trends in Wireless communication: Mobile Internet, GPS, 3G, 4G, Wi-Fi, Bluetooth, Wireless Application Protocol,

Electronic Commerce, Types of E-Commerce and their utilities, M-Commerce.

Advanced Trends in IT - Mobile Computing, Cloud Technology, Bioinformatics, Virtual Reality, Neural Network, Grid Computing, Intelligent Software Agent, , Virtual LAN Technology, Distributed Computing, OLAP, Data Mining, BPO & KPO, Artificial Intelligence & Expert System, ERP, E-Banking.

- 1) Dr. Madhulika Jain, Shashank&Satish Jain ,"Information technology Concepts", BPB Publication, New Delhi, ISBN-- 8176562769
- 2) Information Technology Dr. SushilaMadan (Taxmann's)
- 3) Computer Fundamentals By P. K. Sinha
- 4) Business On The Net An Introduction To The Whats And Hows Of Ecommerce By K. N. Agarwala& Others (Macmilan)
- 5) Verma, "Computer, Internet & Multimedia Dictionary", Universities Press



Paper 16: FC2-2 (Foundation 2)

BANKING OPERATIONS AND SERVICES

Hours/Week: 4 Credits: 4

Unit I: Overview - Definition-utility of banks - banks and economic development -types of banks with their individual functions -Role of RBI - Monetary management -business in the globalized era, Rights of a banker, Clayton's case, Banker's Obligation to honourcheques, Secrecy of customers' accounts. Customers' Accounts -.Introduction for opening new accounts, opening of savings, current and fixed deposit accounts Minor's accounts, Club accounts, Partnership accounts, Joint stock company's account. Attorney's account, Joint accounts, Insolvency of the customer

Unit II: Payment and Collection of Cheques - Form of Cheque, Date, Amount, Insufficiency of funds, customer's signature, Countermanding payment of cheque, Crossing, Not Negotiable Crossing, Endorsements and Effect of Material Alterations. Liability for conversion, Protection to the collecting Banker, Duties of Collecting Banker.

Unit III: Bills of Exchange - Definition, Parties, Accommodation Bill, Calculation of Date of Maturity, Dishonour of Bills, Noting and Protesting, Drawee in Case of Need. Bank Drafts - salient features Advances - Advances against various securities, Life Policy, Fixed Deposit Receipt, Goods, Shares, Advances against Guarantees, Advances to Small-scale industries, Registration of Charge under Companies Act, 1956. Accounts Receivable financing Advances for priority sectors—Hypothecation, Documentation.

Unit IV: Investment Banking services: Fee based and Fund based services: Credit Cards, Debit Cards, , Venture Capital, Factoring, Forfeiting and Bill Discounting. Leasing and Hire Purchase, Housing Finance, Other investment banking a services including distribution of Insurance and Mutual fund products, PMS — Process and monitoring. Merchant Banking Services - Merchant Banking: An Introduction, Issue Management, Corporate Restructuring and Mergers and Project Financing. Securitization. Credit Rating.

- 1. Management of Banking and Financial Services, Padmalatha Suresh & Justin Paul, Pearson Education
- 2. Basics of Banking IIBF, Mumbai Taxmann Publications paper I
- 3. Banking Law & Practices by H.C. Agarwal, Siwan Publications. -paper I
- 4. Indian Financial System & Commercial Banking by Shri B. Raviramchandran, Dr. Dwivedi et al, IIBF, Mumbai Paper I
- 5. An introduction to documentary Credit RupNarayan Bose, Macmilan India Ltd. New Delhi –paper I
- 6. Financial Institutions, Markets & money by David S. Kidwell & others, John Willy & Sons
- 7. The Indian Financial System, 3rd Edition, Bharati V. Pathak, Pearson Education



Paper 16: FC2-3 (Foundation 2)

INFORMATION SECURITY AND CYBER LAW

Hours/Week: 4 Credits: 4

Unit-I: Information Security: Overview, need for information security, objectives of Information security. Global information systems and their evolution, basics of information systems, role of the Internet and the World Wide Web - Understanding about the threats to information systems security Building blocks of InfoSec, How Organizations manage security of their information systems Information security risk analysis fundamentals - Importance of physical security and biometrics controls for protecting information systems assets - Security considerations for the mobile work force - Network security perspectives, networking and digital communications (overview only), security of wireless networks.

Unit-II: - Cryptographic techniques and Encryption, Intrusion Detection Systems and Firewalls, security of virtual private networks - Security issues in application development with emphasis on integration of enterprise applications, database security, operating security and security of electronic mailing systems - Security models and frameworks and standards through introduction to the ISO 27001, SSE-CMM (systems security engineering – capability maturity model), COBIT (Control Objectives for Information and related technologies) and the SarbanesOxley Act (SOX) and SAS 70 (statement on auditing standards) - Privacy Fundamentals, business practices' impact on data privacy, technological impact on data privacy, privacy issues in web services and applications based on web services - Information security best practices – staffing, audits, disaster recovery planning and business continuity planning and asset management - Ethical issues and intellectual property concerns for information security professionals – copy right, data protection etc.

Unit-III: Introduction of IT Act 2000, main features of IT Act 2000, Digital Signature - Access Control: Operating system Access Controls, Group and Roles, Access Control lists, Unix Operating System Security, Windows NT, Capabilities, Added Features in Windows 2000, Granularity, Sandboxing and Proof-carrying code, Hardware protection, Other technical Attacks. - Cryptography &PKI: Symmetric Cryptography, Asymmetric Cryptography, Keys, Hash Functions, Digital Signatures. - Distributed Systems - Concurrency, Fault Tolerance and Fault Recovery, Naming.

Unit-IV - Multilevel and Multilateral Security : Multilevel Security, Multilateral Security - Electronic Banking -Banking and Bookkeeping. - Monitoring Systems -Introduction, Alarms, Prepayment Masters. - Biometrics : Physiological biometric techniques, behavioral biometric techniques, - New biometric techniques, biometric systems. - Incident Response : Incident Response, Prerequistes to planning an IRT. - Network attack and Defence : Most Common Attacks, Scripts Kiddies and Packaged Defence. - Management Issues :Organisational Issues, - Protecting E-commerce Systems - Introduction - Hacking - Introduction

- 1. Information Systems Security Management Nina S. Godbole (Wiley India Pvt. Ltd.)
- 2. Security Engineering Ross Anderson



- 3. Information Security Management Handbook -Harold Tpton&Micki Krause (Auerbach Publications)
- 4. Network Security Essentials: Applications and Standards W. Stallings (Pearson Education)
- 5. eSecurity and You SandeepOberoi (Tata McGraw-Hill)
- 6. Cyber Laws Singh Yatindra
- 7. Cyber Crime Bansal S K
- 8. Cyber law , E-commerce & M-Commerce AhmandTabrez
- 9. Handbook of Cyber and E-commerce laws Bakshi P M &Suri R K
- 10. Management Fundamentals and Information Systems Dr. SushilaMadan (Taxmann's)



Paper 16: CDC2-1 (Core Subject Centric 2)

Parallel Computing

Hours/Week: 4 Credits: 4

Unit-1:

Introduction to Parallel Computing:Motivating Parallelism, Scope, Applications, Parallel Programming Platforms:Implicit Parallelism: Limitations of Memory System Performance, Dichotomy of Parallel Computing Platforms, Physical Organization of Parallel Platforms, Communication Costs in Parallel Machines, Routing Mechanisms for Interconnection Networks, Impact of Process-Processor Mapping and Mapping Techniques

Unit-2:

Principles of Parallel Algorithm Design: Preliminaries ,Decomposition Techniques, Characteristics of Tasks and Interactions, Mapping Techniques for Load Balancing, Methods for Containing Interaction Overheads, Parallel Algorithm Models, Basic Communication operations:One-to-All Broadcast and All-to-One Reduction, All-to-All Broadcast and Reduction, All-Reduce and Prefix-Sum Operations, Scatter and Gather, All-to-All Personalized Communication, Circular Shift, Improving the Speed of Some Communication Operations

Unit-3:

Analytical Modeling of Parallel Programs: Performance Metrics for Parallel Systems, The Effect of Granularity on Performance, Scalability of Parallel Systems, Minimum Execution Time and Minimum Cost-Optimal Execution Time, Asymptotic Analysis of Parallel Programs, Other Scalability Metrics, Programming Using the Message Passing Paradigm: Principles of Message-Passing Programming, The Building Blocks: Send and Receive Operations, MPI: the Message Passing Interface, Topologies and Embedding, Overlapping Communication with Computation, Collective Communication and Computation Operations, Groups and Communicators,

Unit-4:

Programming Shared Address Space Platforms: Thread Basics, Why Threads? The POSIX Thread API, Thread Basics: Creation and Termination, Synchronization Primitives in Pthreads, Controlling Thread and Synchronization Attributes, Thread Cancellation, Composite Synchronization Constructs, Tips for Designing Asynchronous Programs, OpenMP: a Standard for Directive Based Parallel Programming, Dense Matrix Algorithms: Matrix- Vector Multiplication, Matrix-Matrix Multiplication, System of Linear Equations Sorting: Issues in Sorting on Parallel Computers, Sorting Networks, Bubble Sort and its Variants, Quicksort, Bucket and Sample Sort, Other Sorting Algorithms, Graph Algorithms: Minimum spanning tree Prims Algorithm, Single-Source Shortest Paths: Dijkstra's Algorithm Search Algorithms for Discrete Optimization Problems: Sequential Search Algorithms, Search Overhead Factor, Parallel Depth-First Search, Parallel Best-First Search, Speedup Anomalies in Parallel Search Algorithms, Dynamic Programming: Overview of Dynamic Programming, Serial Monadic DP Formulations, Monadic DP Formulations, The Longest-Common- Subsequence Problem, Serial Polyadic DP Formulations, Floyd's All-Pairs Shortest-Paths Algorithm, NonserialPolyadic DP Formulations, The Optimal Matrix-Parenthesization Problem, Fast Fourier Transform: The Serial Algorithm, The Binary-Exchange Algorithm, The Transpose Algorithm



Books:

1. Introduction to Parallel Computing, AnanthGrama, Pearson Education

- 1. Fundamental of Paralle Processing, Harry F. Jordan, Gita Alaghband, Pearson Education
- 2. Parallel Programming, Michael Allen, Barry Wilkinson, Pearson Education



Paper 16: CDC2-2 (Core Subject Centric 2)

MOBILE & CYBER FORENSICS

Hours/Week: 4 Credits: 4

Unit I: Mobile Forensic: History, Professional Applications, Types of evidence, Internal memory, External memory, Service provider logs, Forensic process, Seizure, Acquisition, examination and analysis, Data acquisition types, Manual acquisition, Logical acquisition, File system acquisition Physical acquisition tools, Commercial Forensic Tools, Open Source Tools, Forensic desoldering, Chip re-balling, JTAG, Command Line Tools, System commands AT commands dd Non-Forensic Commercial Tools, Flasher tools, controversies.

Unit II: Live Forensic: live response, volatile memory analysis, volatility, PTFinder, the impact on investigated system, memory image analysis, recovering cached and internet artifacts, internet browsing artifacts, volatile data acquisition, volatile forensic method, runtime disk explorer, logical acquisition, memory dump analyzer, crash dump analyzer, cryptanalysis, MAC times, metadata issues, analyzing file time stamps.

Unit III: Image Forensic: Detecting traces of re-sampling, more images are spliced together, detect high quality and consistent image forgeries, detect geometric transformations such as scaling, rotation or skewing re-sampling and interpolation. Detecting near—duplicated image regions, common type of digital image forgery, copy—move forgery, Noise inconsistencies analysis to conceal traces of tampering altered image regions. Application of cyclostationarity analysis to image forensics, (cyslostationary signals) exhibit periodicity in their statistics. Find the traces of geometric transformation shows promising results. Double JPEG compression, CFA analysis, quantization tables analysis, etc.

Unit IV: Network & Anti-Computer Forensics: Ethernet analysis, Network interface card analysis, wireless forensic, attackers footprints, firewall logs, IDS/IPS, web proxies, traffic captures, DHCP log examination, sniffing traffic, analyzing proxy cache, tools like tcpdumps, Snort, ngrep, tcpxtract, and wireshark. Email tracker pro, analyzing index.dat, input debugging, controlled flooding, ICMP traceback, packet marking techniques, honeypots and honeynets, source path isolation engine (SPIE). Anti-Computer Forensic: Definition, Sub-categories, Purpose and goals, Data hiding, Encryption, Steganography, Other forms of data hiding, Artifact wiping, Disk cleaning utilities, File wiping utilities, Disk degaussing / destruction techniques, Trail obfuscation, Attacks against computer forensics Physical, Effectiveness of anti-forensics

- 1. Wireless security model randall Nichols
- 2. Mobile application security by himanshudwivedi
- 3. Wireless crime and forensic investigation by Gregory kipper
- 4. Digital image forensic by husrevtaha, nasirmemon
- 5. Computer forensic investigating data and image files by Ec-council
- 6. Network forensic tracking hackers by sherri Davidoff
- 7. Mastering windows network forensic by stevenanson
- 8. Anti computer forensic by Grednumitor
- 9. Computer forensic Nathan Clarke
- 10. Gregory Kipper. Investigator's Guide to Steganography, Auerbach Publications.
- 11. Wireshark 101 essential skills for network analysis by laura chapel



- 12. Internet safety by leonotenboom
- 13. Guide to secure intranet and extranet server by Verisign
- 14. Intrusion detection with Snort by byrafeequrrehman
- 15. Improving web application security by Microsoft press
- 16. Open source security tools by tony howlett
- 17. Web application security by bryan Sullivan
- 18. Data recovery e-book V 1.5



Subject wise Core ElectivePapers

M. Sc. Subject	Core elective paper to be opted in	Core elective paper to be opted in		
	sem III (Sem V in case of M. Sc.	sem IV (Sem VI in case of M. Sc.		
	(Tech) Applied Geology)	(Tech) Applied Geology)		
M. Sc. (Computer Science)	Neural Network	Design and Analysis of Algorithm		
	Multimedia Technologies	Embedded System		
	ASP.NET	Pattern Recognition		

Foundation Course: (Candidate can opt for any one foundation course paper as shown below in the semester III and IV (Semester V & VI in case of M. Sc. (Tech) Applied Geology). However, Student shall opt for this paper from any other subject other than his / her main subject for postgraduarion. If the candidate decides to opt for foundation course papers then he/she shall not be eligible to opt for Core (Discipline Centric) papers in their respective subjects). List of foundation courses available:

M. Sc. Subject	Foundation Course I in semester III (Sem V in case of M. Sc. (Tech) Applied Geology)	Foundation Course II in Semester IV (Sem VI in case of M. Sc. (Tech) Applied Geology)
M. Sc. (Computer Science)	Operating system concepts	Advances in information technology
	Principles of Management	Banking Operations And Services
	E-Business	Information Security And Cyber
		Law

Core (Discipline Centric): (Candidate can opt for this paper as shown below in the semester III and IV (Semester V & VI in case of M. Sc. (Tech) Applied Geology) in their main subject of post graduation only. If the candidate decides to opt for Core (Discipline Centric) papers in their main subject of post graduation then he/she shall not be eligible to opt for Foundation Course papers neither in their own subject nor in any other subject). List of Core (Discipline Centric) course available in the respective subject:

M. Sc. Subject	Core (Discipline Centric) I in semester III (Sem V in case of M. Sc. (Tech) Applied Geology)	Core (Discipline Centric) II in Semester IV (Sem VI in case of M. Sc. (Tech) Applied Geology)
M. Sc. (Computer Science)	Mobile Computing	Parallel Computing
	Digital & Cyber Forensics	Mobile & Cyber Forensics

