

B. Com. : Three-Year (6-Semester) CBCS Programme			
<i>Basic Structure: Distribution of Courses</i>			
1	Ability-Enhancement Compulsory Course (AECC)	2 Papers of 4 Credit Hrs. each (Total Credit Hrs. 4X2)	8
2	Skill-Enhancement Elective Course (SEC)	4 Papers of 4 Credit Hrs. each (Total Credit Hrs. 4X4)	16
3	Core Course	12 Papers of 6 Credit Hrs. each (Total Credit Hrs. 12X6) (5 Lectures and 1 Tutorial)	72
4	Discipline Specific Elective (DSE)	4 Papers of 6 Credit Hrs. each (Total Credit Hrs. 3X6) (5 Lectures and 1 Tutorial)	24
5	Generic Elective (GE)	2 Papers of 6 Credit Hrs. each (Total Credit Hrs. 3X6) (5 Lectures and 1 Tutorial)	12
	Total Credit Hours		132

Notes:

1 Ideal Lecture Class size: 50 to 60 students

2 Ideal Tutorial group Size: 12 to 15 students

3 Ideal Laboratory Practical Batch Size: 20 Students

**B. Com. : Three-Year (6-Semester) CBCS
Programme Structure**

Course No.	Course Title	Course Type
	Semester I	
BC 1.1	Environmental Studies	Ability-Enhancement Compulsory Course (AECC)-1
BC 1.2	Financial Accounting	Core Course C-1
BC 1.3	Business Organisation and Management	Core Course C-2
ENGL 101	English – 1 Core English (Compulsory for B.A./B.Com)	Core Course C-3
	Semester II	
BC 2.1	Language: Hindi/Modern Indian Language	Ability-Enhancement Compulsory Course (AECC)-2
BC 2.2	Business Law	Core Course C-4
BC 2.3	Business Mathematics and Statistics	Core Course C-5
HIND200	Hindi	Core Course C-6
	Semester III	
BC 3.1	Company Law	Core Course C-7
BC 3.2	Income Tax Law and Practice	Core Course C-8
	English	Core Course C-9
BC 3.4	Computer Applications in Business	Skill-Enhancement Elective Course (SEC)-1
	Semester IV	

HIND 400	Hindi	Core Course C-10
BC 4.2	Corporate Accounting	Core Course C-11
BC 4.3	Cost Accounting	Core Course C-12
BC 4.4	E-Commerce	Skill-Enhancement Elective Course (SEC)-2
	Semester V	
BC 5.1	Any one of the following a. Human Resource Management b. Principles of Marketing c. Auditing and Corporate Governance	Discipline Specific Elective (DSE)-1
BC 5.2	Any one of the following a. Fundamentals of Financial Management b. Indirect Tax Law	Discipline-Specific Elective (DSE)-2
BC 5.3	Entrepreneurship	Skill-Enhancement Elective Course (SEC)-3
BC 5.4	Principles of Micro Economics	Generic Elective (GE)-1
	Semester VI	
BC 6.1	Any one of the following Discipline- a. Corporate Tax Planning b. Banking and Insurance c. Management Accounting d. Computerised Accounting System	Specific Elective (DSE)-3
BC 6.2	Any one of the following Discipline- a. International Business b. Office Management and Secretarial Practice	Specific Elective (DSE)-4

	c. Fundamentals of Investment d. Consumer Protection	
BC 6.3	Personal Selling and Salesmanship	Skill-Enhancement Elective Course (SEC)-4
BC6.4	Indian Economy	Generic Elective (GE)-2

Note:

1. For Practical Lab based papers:

- a. Core Course papers BC 1.2 (Financial Accounting) and BC 3.2 (Income-tax law and Practice), there shall be 4 Credit Hrs. for Lectures + one credit hr. (Two Practical Periods per week per batch) for Practical Lab + one credit Hr for Tutorials (per group)
- b. Discipline Specific Elective paper 6.1(d) (Computerised Accounting System), there shall be 4 Credit Hrs. for Lectures + Two Credit hrs. (4 Practical Periods per week per batch) for Practical Lab
- c. Skill Enhancement Elective Course SEC-2 paper BC 4.4 (E-Commerce), there shall be 3 Credit Hrs. for Lectures + One Credit hrs. (2 Practical Periods per week per batch) for Practical Lab
- d. Skill Enhancement Elective Course SEC-2 paper BC 3.4 (Computer Applications in Business), there shall be 2 Credit Hrs. for Lectures + Two Credit hrs. (4 Practical Periods per week per batch) for Practical Lab

2. For other core and elective papers, there shall be Five lectures and One Tutorial (per batch)

B.Com.: Semester I

Ability-Enhancement Compulsory Course (AECC)-1

BC 1.1: Environmental Studies

Common Syllabus to be provided by the respective Department

B.Com: Semester I
Paper BC 1.2: FINANCIAL ACCOUNTING

Duration: 3 hrs.

Marks: 50

Lectures: 52, Practical: 26

Objectives: The objective of this paper is to help students to acquire conceptual knowledge of the financial accounting and to impart skills for recording various kinds of business transactions.

CONTENTS

UNIT	TOPIC	DETAILS
1	(a). Theoretical Framework	<p>i. Accounting as an information system, the users of financial accounting information and their needs. Qualitative characteristics of accounting, information. Functions, advantages and limitations of accounting. Branches of accounting. Bases of accounting; cash basis and accrual basis.</p> <p>ii. The nature of financial accounting principles – Basic concepts and conventions: entity, money measurement, going concern, cost, realization, accruals, periodicity, consistency, prudence (conservatism), materiality and full disclosures.</p> <p>iii. Financial accounting standards: Concept, benefits, procedure for issuing accounting standards in India. Salient features of First-Time Adoption of Indian Accounting Standard (Ind-AS) 101. International Financial Reporting Standards (IFRS): - Need and procedures.</p>
	(b). Accounting Process	From recording of a business transaction to preparation of trial balance.
2	(a). Business Income	<p>i. Measurement of business income-Net income: the accounting period, the continuity doctrine and matching concept. Objectives of measurement.</p> <p>ii. Revenue recognition: Recognition of expenses.</p> <p>iii. The nature of depreciation. The accounting concept of depreciation. Factors in the measurement of depreciation. Methods of computing depreciation: straight line method and diminishing balance</p>

		method; Disposal of depreciable assets-change of method. iv. Inventories: Meaning. Significance of inventory valuation. Inventory Record Systems: periodic and perpetual. Methods: FIFO, LIFO and Weighted Average. Salient features of Indian Accounting Standard (IND-AS): 2 (Theory only)
	(b). Final Accounts	Capital and revenue expenditures and receipts: general introduction only. Preparation of financial statements of non-corporate business entities
3	Accounting for Hire-Purchase and Installment Systems, Consignment, and Joint Venture	i) Accounting for Hire-Purchase Transactions, Journal entries and ledger accounts in the books of Hire Vendors and Hire purchaser for large value items including Default and repossession. ii) Consignment: Features, Accounting treatment in the books of the consignor and consignee. iii) Joint Venture: Accounting procedures: Joint Bank Account, Records Maintained by Coventurer of (a) all transactions (b) only his own transactions. (Memorandum joint venture account).
4	Accounting for Inland Branches and Accounting for Dissolution of Partnership Firm	Accounting for Inland Branches Concept of dependent branches; accounting aspects; debtors system, stock and debtors system, branch final accounts system and whole sale basis system. Independent branches: concept accounting treatment: important adjustment entries and preparation of consolidated profit and loss account and balance sheet. Accounting for Dissolution of Partnership Firm Accounting of Dissolution of the Partnership Firm Including Insolvency of partners, sale to a limited company and piecemeal distribution
Practical	Computerised Accounting Systems	Computerised Accounting Systems: Computerized Accounts by using any popular accounting software: Creating a Company; Configure and Features settings; Creating Accounting Ledgers and Groups; Creating Stock Items and Groups; Vouchers Entry; Generating Reports – Cash Book, Ledger Accounts, Trial Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement Selecting and shutting a Company; Backup and Restore data of a Company

Note:

- 1. The relevant Indian Accounting Standards in line with the IFRS for all the above topics should be covered.**
- 2. Any revision of relevant Indian Accounting Standard would become applicable immediately.**
- 3. Examination Scheme for Computerised Accounts – Practical for 20 marks. The practical examination will be for 1 hour.**
- 4. Theory Exam shall carry 50 marks**
- 5. Marks for CCA (Continuous Comprehensive Assessment) shall be 30 marks**

Suggested Readings:

1. Robert N Anthony, David Hawkins, Kenneth A. Merchant, *Accounting: Text and Cases*. McGraw-Hill Education, 13th Ed. 2013.
2. Charles T. Horngren and Donna Philbrick, *Introduction to Financial Accounting*, Pearson Education.
3. J.R. Monga, *Financial Accounting: Concepts and Applications*. Mayur Paper Backs, New Delhi.
4. M.C.Shukla, T.S. Grewal and S.C.Gupta. *Advanced Accounts. Vol.-I*. S. Chand & Co., New Delhi.
5. S.N. Maheshwari, and. S. K. Maheshwari. *Financial Accounting*. Vikas Publishing House, New Delhi.
6. Deepak Sehgal. *Financial Accounting*. Vikas Publishing H House, New Delhi.
7. Bhushan Kumar Goyal and HN Tiwari, *Financial Accounting*, International Book House
8. Goldwin, Alderman and Sanyal, *Financial Accounting*, Cengage Learning.
9. Tulsian, P.C. *Financial Accounting*, Pearson Education.
10. *Compendium of Statements and Standards of Accounting*. The Institute of Chartered Accountants of India, New Delhi.
11. Jain SP and Narang KL *Financial Accounting*, Kalyani Publishers Ludhiana(Pb)
12. . R S Singal, Vijender Kanwar, "*Financial Accounting*", V. K. Global Publications Pvt. Ltd.

Note: Latest edition of the text books should be used.

ANNEXURE- I

CCA Scheme- Students enrolled for the Academic session 2016-17 onwards CCA will account 30% of total marks i.e. 100, which a student will get in a course. The breakup of 30% i.e. 30 marks is given

- | | |
|---|----------|
| 1. One minor test | 15 marks |
| 2. Assignments/ seminars/ class test/ tutorials/ quiz | 10 marks |
| 3. Attendance | 5 marks |

It is approved that a student will have to pass both the components i.e. CCA and ESE separately to become eligible to be declared successful for the course.

Distribution of marks for CCA in Each course in each semester

- | | |
|------------------------------|----------|
| 1. Minor test | 15 marks |
| 2. Tutorial/ Home Assignment | 10 marks |
| 3. Attendance | 5 marks |

Total = 30 marks

Continuous Comprehensive Assessment (CCA) pattern: instruments for conducting Minor Test and Evaluation of Tutorial/ Home Assignments/ seminars/ quiz/ etc.

Minor test (Marks)	Class test/ tutorials/ assignment/ seminar presentation	Attendance	Total marks
15	10	5	30

Time allowed for conducting Minor Test will be 1.3 hours

(A)* Mode of conducting Minor Test (15 Marks). Minor Test will be conducted after the completion of 48 teaching days (8 weeks)

Three types of questions will be set in Minor Test:-

1. 5MCQ (Choice: 1 out of 4) True/ False type of questions of 1 marks each= 5 marks
2. Two questions of short answer type in about 150 words each of 2.5 marks= 5 marks
3. One question of about 500 words, carrying 5 marks = 5 marks

Marks (Minor Test) = (1+2+3) = (5+5+5) = 15 marks

Total of Minor Test= 15

(B) Distribution of marks for evaluation of Tutorial/ Home Assignment etc.:-

1. 5 marks are assignment for the quality of contents and structure of the assignment
2. 5 marks are assigned for the clarity of language of the spirit (Hindi/ English) and its presentation in the class room.

Total marks 5+5 =10 marks

(C) Attendance = 5 marks

Note: Paper setting Scheme for End Semester Examination (50 marks)

Part	Section	No. Of Questions	Syllabus Coverage	Nature of Q & Answers	Question to be attempted	Marks	Max. Marks
A	1	8	Complete	Objective (MCQ)	8	1 each	8
	2	5	Complete	Short answer about 50 words	5	2 each	10
B	-	2	Unit- I		1	8	8
C	-	2	Unit- II		1	8	8
D	-	2	Unit- III		1	8	8
E	-	2	Unit- IV		1	8	8
Sub Total							50
Practical Examination							20

Total	70
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Note: In numerical papers, there should be preferably 50 percent numerical questions in each unit.

B.Com.: Semester I

Paper BC 1.3: BUSINESS ORGANISATION AND MANAGEMENT

Duration: 3 hrs.

Marks: 70

Lectures: 65

Objective: The course aims to provide basic knowledge to the students about the organisation and management of a business enterprise.

Contents

UNIT	TOPIC	DETAILS
1	Foundation of Indian Business and Business Enterprises	Manufacturing and service sectors; Small and medium enterprises; Problems and government policy. India's experience of liberalisation and globalisation. Technological innovations and skill development. 'Make in India' Movement. Corporate Social responsibility and ethics Emerging opportunities in business; Franchising, Outsourcing, and E-commerce. Forms of Business Organisation: Sole Proprietorship, Joint Hindu Family Firm, Partnership firm, Joint Stock Company, Cooperative society; Limited Liability Partnership; Choice of Form of Organisation. Government - Business Interface; Rationale and Forms of Public Enterprises. International Business. Multinational Corporations.
2	Management and Organisation	The Process of Management: Planning; Decision-making; Strategy Formulation. Indian Philosophy of Management: The Gita and Management, Gandhian Philosophy. Organizing: Basic Considerations; Departmentation – Functional, Project, Matrix and Network; Delegation and Decentralisation of Authority; Groups and Teams.
3	Leadership, Motivation and Control	Leadership: Concept and Styles; Trait and Situational Theory of Leadership. Motivation: Concept and Importance; Maslow Need Hierarchy Theory; Herzberg Two Factors Theory. Communication: Process and Barriers; Control: Concept and Process.

4	Functional Areas of Management	Marketing Management: Marketing Concept; Marketing Mix; Product Life Cycle; Pricing Policies and Practices Financial Management: Concept and Objectives; Sources of Funds – Equity Shares, Debentures, Venture Capital and Lease Finance. Securities Market, Role of SEBI. Human Resource Management: Concept and Functions; Basic Dynamics of Employer – Employee Relations.
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Suggested Readings:

1. Kaul, V.K., *Business Organisation and Management*, Pearson Education, New Delhi
2. Chhabra, T.N., *Business Organisation and Management*, Sun India Publications, New Delhi,
3. Gupta CB, *Modern Business Organisation*, Mayur Paperbacks, New Delhi
4. Koontz and Wehrich, *Essentials of Management*, McGraw Hill Education.
5. Basu, C. R., *Business Organization and Management*, McGraw Hill Education.
6. Jim, Barry, John Chandler, Heather Clark; *Organisation and Management*, Cengage Learning.
7. B.P. Singh and A.K.Singh, *Essentials of Management*, Excel Books
8. Buskirk, R.H., et al; *Concepts of Business: An Introduction to Business System*, Dryden Press, New York.
9. Burton Gene and Manab Thakur; *Management Today: Principles and Practice*; Tata McGraw Hill, New Delhi.
10. Griffin, *Management Principles and Application*, Cengage Learning
11. Sharma RK, Gupta SK and Chandel Kulbhushan, *Business Organisation and Management* Kalyani Publishers Ludhiana(Pb)

(Note: Latest Editions of the above books may be used.)

ANNEXURE- I

CCA Scheme- Students enrolled for the Academic session 2016-17 onwards CCA will account 30% of total marks i.e. 100, which a student will get in a course. The breakup of 30% i.e. 30 marks is given

4. One minor test	15 marks
5. Assignments/ seminars/ class test/ tutorials/ quiz	10 marks
6. Attendance	5 marks

It is approved that a student will have to pass both the components i.e. CCA and ESE separately to become eligible to be declared successful for the course.

Distribution of marks for CCA in Each course in each semester

4. Minor test	15 marks
5. Tutorial/ Home Assignment	10 marks
6. Attendance	5 marks

Total = 30 marks

Continuous Comprehensive Assessment (CCA) pattern: instruments for conducting Minor Test and Evaluation of Tutorial/ Home Assignments/ seminars/ quiz/ etc.

Minor test (Marks)	Class test/ tutorials/ assignment/ seminar presentation	Attendance	Total marks
15	10	5	30

Time allowed for conducting Minor Test will be 1.3 hours

(A)* Mode of conducting Minor Test (15 Marks). Minor Test will be conducted after the completion of 48 teaching days (8 weeks)

Three types of questions will be set in Minor Test:-

4. 5MCQ (Choice: 1 out of 4) True/ False type of questions of 1 marks each= 5 marks
5. Two questions of short answer type in about 150 words each of 2.5 marks= 5 marks
6. One question of about 500 words, carrying 5 marks = 5 marks

Marks (Minor Test) = (1+2+3) = (5+5+5) = 15 marks

Total of Minor Test= 15

(B) Distribution of marks for evaluation of Tutorial/ Home Assignment etc.:-

3. 5 marks are assignment for the quality of contents and structure of the assignment
4. 5 marks are assigned for the clarity of language of the spirit (Hindi/ English) and its presentation in the class room.

Total marks 5+5 =10 marks

(C) Attendance = 5 marks

Note: Paper setting Scheme for End Semester Examination (70 marks)

Part	Section	No. Of	Syllabus Coverage	Nature of Q & Answers	Question to be attempted	Marks	Max. Marks
A	1	10	Complete	Objective (MCQ)	10	1 each	10
	2	8	Complete	Short answer 100-150 words	5	4 each	20
B	-	2	Unit- I		1	10	10
C	-	2	Unit- II		1	10	10

D	-	2	Unit- III		1	10	10
E	-	2	Unit- IV		1	10	10
Total							70

B.Com.: Semester II

Ability-Enhancement Compulsory Course (AECC)-2

BC 2.1: Language: English/Hindi/Modern Indian Language

Common Syllabus to be provided by the respective Department

B.Com.: Semester II

Paper- BC 2.2: BUSINESS LAW

Duration: 3 hrs.

Marks: 70

Lectures: 65

Objective: The objective of the course is to impart basic knowledge of the important business legislation along with relevant case law.

Contents:

UNIT	TOPIC	DETAILS
1	The Indian Contract Act, 1872: General Principles of Contract	a) Contract – meaning, characteristics and kinds b) Essentials of a valid contract - Offer and acceptance, consideration, contractual capacity, free consent, legality of objects. c) Void agreements d) Discharge of a contract – modes of discharge, breach and remedies against breach of contract. e) Contingent contracts f) Quasi - contracts
2	The Indian Contract Act, 1872: Specific Contracts	a) Contract of Indemnity and Guarantee b) Contract of Bailment c) Contract of Agency
3	The Sale of Goods Act, 1930 and The Negotiable Instruments Act 1881	The Sale of Goods Act, 1930 a) Contract of sale, meaning and difference between sale and agreement to sell. b) Conditions and warranties c) Transfer of ownership in goods including sale by a non-owner d) Performance of contract of sale e) Unpaid seller – meaning, rights of an unpaid seller against the goods and the buyer. The Negotiable Instruments Act 1881 a) Meaning, Characteristics, and Types of Negotiable Instruments : Promissory Note, Bill of Exchange, Cheque b) Holder and Holder in Due Course, Privileges of Holder in Due Course. c) Negotiation: Types of Endorsements d) Crossing of Cheque

		e) Bouncing of Cheque
4	Partnership Laws	<p>A) The Partnership Act, 1932</p> <ol style="list-style-type: none"> Nature and Characteristics of Partnership Registration of a Partnership Firms Types of Partners Rights and Duties of Partners Implied Authority of a Partner Incoming and outgoing Partners Mode of Dissolution of Partnership <p>B) The Limited Liability Partnership Act, 2008</p> <ol style="list-style-type: none"> Salient Features of LLP Differences between LLP and Partnership, LLP and Company LLP Agreement, Partners and Designated Partners Incorporation Document Incorporation by Registration Partners and their Relationship

Suggested Readings:

1. M.C. Kuchhal, and Vivek Kuchhal, *Business Law*, Vikas Publishing House, New Delhi.
2. Avtar Singh, *Business Law*, Eastern Book Company, Lucknow.
3. Ravinder Kumar, *Legal Aspects of Business*, Cengage Learning
4. SN Maheshwari and SK Maheshwari, *Business Law*, National Publishing House, New Delhi.
5. Aggarwal S K, *Business Law*, Galgotia Publishers Company, New Delhi.
6. Bhushan Kumar Goyal and Jain Kinneri, *Business Laws*, International Book House
7. Sushma Arora, *Business Laws*, Taxmann Pulications.
8. Akhileshwar Pathak, *Legal Aspects of Business*, McGraw Hill Education, 6th ed.
9. P C Tulsian and Bharat Tulsian, *Business Law*, McGraw Hill Education
10. Sharma, J.P. and Sunaina Kanojia, *Business Laws*, Ane Books Pvt. Ltd., New Delhi.
11. Ashok Sharma, "Business Law", V. K. Global Publications Pvt. Ltd.

Note: Latest edition of text books may be used.

ANNEXURE- I

CCA Scheme- Students enrolled for the Academic session 2016-17 onwards CCA will account 30% of total marks i.e. 100, which a student will get in a course. The breakup of 30% i.e. 30 marks is given

- | | |
|---|----------|
| 7. One minor test | 15 marks |
| 8. Assignments/ seminars/ class test/ tutorials/ quiz | 10 marks |
| 9. Attendance | 5 marks |

It is approved that a student will have to pass both the components i.e. CCA and ESE separately to become eligible to be declared successful for the course.

Distribution of marks for CCA in Each course in each semester

- | | |
|------------------------------|----------|
| 7. Minor test | 15 marks |
| 8. Tutorial/ Home Assignment | 10 marks |
| 9. Attendance | 5 marks |

Total = 30 marks

Continuous Comprehensive Assessment (CCA) pattern: instruments for conducting Minor Test and Evaluation of Tutorial/ Home Assignments/ seminars/ quiz/ etc.

Minor test (Marks)	Class test/ tutorials/ assignment/ seminar presentation	Attendance	Total marks
15	10	5	30

Time allowed for conducting Minor Test will be 1.3 hours

(A)* Mode of conducting Minor Test (15 Marks). Minor Test will be conducted after the completion of 48 teaching days (8 weeks)

Three types of questions will be set in Minor Test:-

7. 5MCQ (Choice: 1 out of 4) True/ False type of questions of 1 marks each= 5 marks
8. Two questions of short answer type in about 150 words each of 2.5 marks= 5 marks
9. One question of about 500 words, carrying 5 marks = 5 marks

Marks (Minor Test) = (1+2+3) = (5+5+5) = 15 marks

Total of Minor Test= 15

(B) Distribution of marks for evaluation of Tutorial/ Home Assignment etc.:-

5. 5 marks are assignment for the quality of contents and structure of the assignment
6. 5 marks are assigned for the clarity of language of the spirit (Hindi/ English) and its presentation in the class room.

Total marks 5+5 =10 marks

(C) Attendance = 5 marks

Note: Paper setting Scheme for End Semester Examination (70 marks)

Part	Section	No. Of	Syllabus Coverage	Nature of Q & Answers	Question to be attempted	Marks	Max. Marks
A	1	10	Complete	Objective	10	1 each	10

				(MCQ)			
	2	8	Complete	Short answer 100-150 words	5	4 each	20
B	-	2	Unit- I		1	10	10
C	-	2	Unit- II		1	10	10
D	-	2	Unit- III		1	10	10
E	-	2	Unit- IV		1	10	10
Total							70

B.Com.: Semester II

Paper BC 2.3. BUSINESS MATHEMATICS AND STATISTICS

Objective: The objective of this course is to familiarize students with the applications of mathematics and statistical techniques in business decision-making.

Notes:

1. Use of simple calculator is allowed.
2. Proofs of theorems / formulae are not required.
3. Trigonometric functions are not to be covered.

UNIT	TOPIC	DETAILS
		Part A: Business Mathematics
1	Business Mathematics	Matrices Definition of a matrix. Types of matrices; Algebra of matrices. Calculation of values of determinants up to third order; Adjoint of a matrix; Finding inverse of a matrix through ad joint; Applications of matrices to solution of simple business and economic problems Differential Calculus Mathematical functions and their types – linear, quadratic, polynomial; Concepts of limit and continuity of a function; Concept of differentiation; Rules of differentiation – simple standard forms. Applications of differentiation – elasticity of demand and supply; Maxima and Minima of functions (involving second or third order derivatives) relating to cost, revenue and profit. Basic Mathematics of Finance Simple and compound interest Rates of interest – nominal, effective and continuous – their interrelationships; Compounding and discounting of a sum using different types of rates
		Part – B: Business Statistics
2	Uni-variate Analysis	Measures of Central Tendency including arithmetic mean, geometric mean and harmonic mean: properties and applications; mode and median. Partition values - quartiles, deciles, and percentiles. Measures of Variation: absolute and relative. Range, quartile deviation and mean deviation; Variance and Standard deviation: calculation and properties.

3	Bi-variate Analysis	Simple Linear Correlation Analysis: Meaning, and measurement. Karl Pearson's co-efficient and Spearman's rank correlation Simple Linear Regression Analysis: Regression equations and estimation. Relationship between correlation and regression coefficients
4	Time-based Data: Index Numbers and Time-Series Analysis	Meaning and uses of index numbers; Construction of index numbers: Aggregative and average of relatives – simple and weighted, Tests of adequacy of index numbers, Construction of consumer price indices. Components of time series; additive and multiplicative models; Trend analysis: Finding trend by moving average method and Fitting of linear trend line using principle of least squares.

Suggested Readings:

1. Mizrahi and John Sullivan. *Mathematics for Business and Social Sciences*. Wiley and Sons.
2. Budnick, P. *Applied Mathematics*. McGraw Hill Publishing Co.
3. N. D. Vohra, *Business Mathematics and Statistics*, McGraw Hill Education (India) Pvt Ltd
4. J.K. Thukral, *Mathematics for Business Studies*, Mayur Publications
5. J. K. Singh, *Business Mathematics*, Himalaya Publishing House.
6. J. K. Sharma, *Business Statistics*, Pearson Education.
7. S.C. Gupta, *Fundamentals of Statistics*, Himalaya Publishing House.
8. S.P. Gupta and Archana Gupta, *Elementary Statistics*, Sultan Chand and Sons, New Delhi.
9. Richard Levin and David S. Rubin, *Statistics for Management*, Prentice Hall of India, NewDelhi.
10. M.R. Spiegel, *Theory and Problems of Statistics*, Schaum's Outlines Series, McGraw Hill Publishing Co.
11. T. R. Jain & S. C. Aggarwal, "Business Mathematics and Statistics", V. K. Global Publications Pvt. td.

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12. Attendance	5 marks

It is approved that a student will have to pass both the components i.e. CCA and ESE separately to become eligible to be declared successful for the course.

Distribution of marks for CCA in Each course in each semester

10. Minor test	15 marks
11. Tutorial/ Home Assignment	10 marks
12. Attendance	5 marks

Total = 30 marks

Continuous Comprehensive Assessment (CCA) pattern: instruments for conducting Minor Test and Evaluation of Tutorial/ Home Assignments/ seminars/ quiz/ etc.

Minor test	Class test/ tutorials/ assignment/ seminar	Attendance	Total marks
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(Marks)	presentation		
15	10	5	30

Time allowed for conducting Minor Test will be 1.3 hours

(A)* Mode of conducting Minor Test (15 Marks). Minor Test will be conducted after the completion of 48 teaching days (8 weeks)

Three types of questions will be set in Minor Test:-

10. 5MCQ (Choice: 1 out of 4) True/ False type of questions of 1 marks each= 5 marks
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Marks (Minor Test) = (1+2+3) = (5+5+5) = 15 marks

Total of Minor Test= 15

(B) Distribution of marks for evaluation of Tutorial/ Home Assignment etc.:-

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Total marks 5+5 =10 marks

(C) Attendance = 5 marks

Note: Paper setting Scheme for End Semester Examination (70 marks)

Part	Section	No. Of	Syllabus Coverage	Nature of Q & Answers	Question to be attempted	Marks	Max. Marks
A	1	10	Complete	Objective (MCQ)	10	1 each	10
	2	8	Complete	Short answer 100-150 words	5	4 each	20
B	-	2	Unit- I		1	10	10
C	-	2	Unit- II		1	10	10
D	-	2	Unit- III		1	10	10
E	-	2	Unit- IV		1	10	10
Total							70