



AC 29-04-2022



**R. A. Podar College of Commerce and Economics  
(Autonomous)  
Matunga, Mumbai.**

**Syllabus  
and  
Question Paper Pattern  
of**

**Bachelor of Commerce with Actuarial Studies  
B. Com (Actuarial Studies)**

**First Year (Semester I and II)**

**Under Choice Based Credit System  
To be implemented from Academic Year 2022-2023**

**Faculty of Commerce**

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## Bachelor of Commerce with Actuarial Studies B.Com (Actuarial Studies)

*Under Choice Based Credit, Grading and Semester  
System Course Structure*

F Y B. Com with actuarial studies

(To be implemented from Academic Year- 2022-2023)

Course Code	Semester I	Credits	Course Code	Semester II	Credits
<b>1</b>	<b>Elective Courses (EC)</b>		<b>1</b>	<b>Elective Courses (EC)</b>	
<b>1A</b>	<b>Discipline Specific Elective (DSE) Courses</b>		<b>1A</b>	<b>Discipline Specific Elective (DSE) Courses</b>	
30101	Accountancy and Financial Management I	<b>03</b>	30201	Accountancy and Financial Management II	<b>03</b>
<b>1B</b>	<b>Discipline Related Elective (DRE) Courses</b>		<b>1B</b>	<b>Discipline Related Elective (DRE) Courses</b>	
30102	Insurance Business I	<b>03</b>	30202	Insurance Business II	<b>03</b>
30103	Business Economics I	<b>03</b>	30203	Business Economics II	<b>03</b>
<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>		<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>	
<b>2A</b>	<b>Ability Enhancement Compulsory Courses (AECC)</b>		<b>2A</b>	<b>Ability Enhancement Compulsory Courses (AECC)</b>	
30104	Business Communication I	<b>03</b>	30204	Business Communication II	<b>03</b>
30105	Environmental Studies I	<b>03</b>	30205	Environmental Studies II	<b>03</b>
<b>2B</b>	<b>Skill Enhancement Courses (SEC)</b>		<b>2B</b>	<b>Skill Enhancement Courses (SEC)</b>	
30106	Foundation Course I	<b>02</b>	30206	Foundation Course – II (Structure of Finance and Regulation)	<b>02</b>
<b>3</b>	<b>Core Courses (CC)</b>		<b>3</b>	<b>Core Courses (CC)</b>	
30107	Financial Mathematics-I	<b>03</b>	30207	Financial Mathematics –II Statistics	<b>03</b>
<b>Total Credits</b>		<b>20</b>	<b>Total Credits</b>		<b>20</b>

**Bachelor of Commerce with Actuarial Studies**  
**B. Com (Actuarial Studies)**  
*Under Choice Based Credit, Grading and Semester*  
*System Course Structure*

(To be implemented from Academic Year- 2022-2023)

## Semester I

Course Code.	Semester – I	Credits
<b>1</b>	<b>Elective Courses (EC)</b>	
<b>1A</b>	<b>Discipline Specific Elective (DSE) Courses</b>	
030101	Accountancy and Financial Management I	<b>03</b>
<b>1B</b>	<b>Discipline Related Elective (DRE) Courses</b>	
030102	Insurance Business I	<b>03</b>
030103	Business Economics I	<b>03</b>
<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>	
<b>2A</b>	<b>Ability Enhancement Compulsory Courses (AECC)</b>	
030104	Business Communication I	<b>03</b>
030105	Environmental Studies I	<b>03</b>
<b>2B</b>	<b>Skill Enhancement Courses (SEC)</b>	
030106	Foundation Course – I	<b>02</b>
<b>3</b>	<b>Core Courses (CC)</b>	
030107	Financial Mathematics I	<b>03</b>
<b>Total Credits</b>		<b>20</b>

# Syllabus of courses of F.Y. B. Com (Actuarial Studies)

With effect from the Academic Year

2022-2023

*Discipline Specific Elective (DSE) Courses*

Course Code 30101

## Accountancy and Financial Management (3 Credits)

### Instructional Objectives:

- To impart knowledge of various accounting concepts, conventions, policies and related accounting standards to the learners.
- To impart knowledge to learners about accounting procedures, methods and techniques in solving problems and issues relating to various areas of accounting.
- To acquaint learners with practical aspects of 'account writing'.
- To introduce accounting concepts and accounting standards with reference to insurance.

### Learning Outcome:

- The learner acquires necessary knowledge on accounting concepts and related accounting standards.
- The learner is able to write the books of Accounts.
- The learner is able to independently read and infer from the books of accounts
- The learner is acquainted with insurance related accounting concepts.

## Semester I

### Modules at a Glance

Accountancy and Financial Management - Paper I (3 Credits)		
Sr. No.	Modules	No. of Lectures
1	Accounting Concepts, Conventions and Related Standards	15
2	Valuation of Inventories: AS-2	15
3	Accounting from incomplete records	15
4	Accounting for Installment Sale, Fire Insurance and Lease	15
Total No. of Lectures:		60

Sr. No.	Modules
1	<b>Accounting Concepts, Conventions and Related Standards</b>
	<ul style="list-style-type: none"> <li>● <b>Accounting Concepts:</b> Business Entity, Going Concern, Money Measurement, Periodicity, Accrual, Matching, Realisation, Historical Cost, Fair Value, Dual Aspect, Contingent Assets, Contingent Liabilities, Provisions v/s Reserves, Charge v/s Appropriation</li> <li>● <b>Accounting Conventions:</b> Conservatism, Materiality, Consistency, Uniformity</li> <li>● <b>Accounting Standards:</b> <ul style="list-style-type: none"> <li><b>AS-1:</b> Disclosure of Accounting Policies: Purpose, Areas of Policies, Illustrations</li> <li><b>AS-6:</b> Depreciation Accounting: Introduction, Definitions, Applicability, Disclosure, Illustrations</li> <li><b>AS-9:</b> Revenue Recognition: Meaning and Scope, Transactions excluded, Sale of Goods, Rendering of Services, Effects of Uncertainties, Disclosure, Illustrations</li> <li><b>AS-10:</b> Accounting for Fixed Assets: Introduction, Definitions, Applicability, Disclosure, Illustrations</li> </ul> </li> </ul>
2	<b>Valuation of Inventories: AS-2</b>
	<ul style="list-style-type: none"> <li>● <b>AS-2:</b> Valuation of Inventories: Meaning and Definition, Applicability, Measurement of Inventory, Disclosure in Final Account, Explanation with Illustrations</li> <li>● <b>Inventory Valuation (Stock):</b> Cost for Inventory Valuation, Inventory Systems, Periodic Inventory, Perpetual Inventory, Valuation: Meaning and Importance, Methods of Stock Valuation as per AS-2, <b>First in First Out (FIFO) Method, Weighted Average Method</b>, Illustrations on computation of inventory as per above methods as on a particular date and as on a balance sheet date if inventory is taken on a date which is either before or after the balance sheet date</li> </ul>
3	<b>Accounting from incomplete records</b>
	<ul style="list-style-type: none"> <li>● Introduction, Problems on preparation of final accounts of Proprietary Trading Concern (By Conversion Method)</li> </ul>
4	<b>Accounting for Installment Sale, Fire Insurance and Lease</b>
	<ul style="list-style-type: none"> <li>● <b>Installment Sale :</b>Meaning, , Distinction between Hire Purchase and Installment Sale, Calculation of Interest, Accounting for Installment Sale by Asset Purchase (Credit Purchase) Method, Interest Suspense Method, Journal Entries, Ledger Accounts, (Including Default, Repossession and Calculation of Cash Price)</li> <li>● <b>Fire Insurance:</b> Concepts and Accounting practices</li> <li>● <b>Lease:</b> Operational Lease, Financial Lease, Accounting in the books of Lessor, Accounting in the books of Lessee</li> </ul>

## **Reference:**

1. Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi.
2. Advance Accounts by Shukla & Grewal, S. Chand and Company (P) Ltd., New Delhi.
3. Advanced Accountancy by R. L Gupta and M Radhaswamy, S. Chand and Company (P) Ltd., New Delhi.
4. Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill & Co. Ltd., Mumbai.
5. Financial Accounting by Lesile Chandwichk, Pentice Hall of India Adin Bakley (P) Ltd.
6. Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech. Publishing Co. Ltd., Mumbai.
7. Financial Accounting by P. C. Tulsian, Pearson Publications, New Delhi Accounting Principles by Anthony, R.N. and Reece J.S., Richard Irwin Inc.
8. Financial Accounting by Monga, J.R. Ahuja, Girish Ahujaand Shehgal Ashok, Mayur Paper Back.
9. Compendium of Statement & Standard of Accounting, ICAI. Indian Accounting Standards, Ashish Bhattacharya, Tata Mc. Grow Hill & Co. Ltd., Mumbai.
10. Financial Accounting by Williams , Tata Mc. Grow Hill & Co. Ltd., Mumbai
11. Company Accounting Standards by Shrinivasan Anand, Taxman.
12. Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.
13. Introduction to Financial Accounting by Horngren, Pearson Publications.
14. Financial Accounting by M. Mukherjee.M. Hanif. Tata McGraw Hill Education Private Ltd; New Delhi.

# Accountancy & Financial Management: Semester I

## *Paper Pattern (Academic Year: 2022-2023)*

### I. Cumulative Continuous Assessment (CCA)

Nature of the submission	Marks
Assignment	20
Class Test	15
Class Participation	5
<b>Total</b>	<b>40</b>

### II. Semester End Examination:60 Marks

Maximum Marks: 60

Duration : 2 Hours

Note: (1) Question No. 1 and 5 are Compulsory

(2) Attempt any Two Questions from the remaining Q. No. 2, 3 & 4.

(3) All questions carry 15 marks each

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
1.	Concept /Application Based Questions (3 Marks Each) To be given : Seven To be attempted : Any Five	15
2.	Practical Question/s (*)	(15 x 2) = 30
3.	Practical Question/s (*)	
4.	Practical Question/s (*)	
5 (A) 5 (B)	Attempt any three out of five sub questions given (2 marks each) Short Notes: Attempt any three out of five given (3 marks each)	6 9
<b>Total</b>		<b>60</b>

\*Note – Q. No. 2, 3 & 4 may be divided into sub questions of 10/5, 8/7 or 5/5/5 marks each.

# Syllabus of courses of F.Y. B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Discipline Specific Elective (DSE) Courses*

Course Code 30101

**Accountancy and Financial Management (3 Credits)**

## Instructional Objectives

- To make the learner aware about basic concepts, terms and evolution of insurance business.
- To introduce the learner to the business of insurance and the principles of insurance contracts.
- To educate the learner about the currently available insurance products.
- To make them aware about growing career opportunities in the field.

## Learning Outcomes:

- The learners understand and appreciate the uniqueness of insurance contracts.
- The learner recognizes different types of Insurance products.
- The learner acquires the necessary skills for comparing insurance products.
- Learners assess the scope of insurance business and the career opportunities.

## Semester I

### Modules at a Glance

Insurance Business I (Principles of Insurance)		
Sr. No.	Modules	No. of Lectures
1	The Conceptual Framework	15
2	The Insurance Contract	15
3	Insurance Products	15
4	The Insurance Market	15
Total No. of Lectures:		60



Sr. No.	Modules
1	<b>The Conceptual Framework</b>
	<ol style="list-style-type: none"> <li>1. What is insurance- Meaning and Definition</li> <li>2. Brief history of Insurance</li> <li>3. Understanding Perils and Risks</li> <li>4. Classification of Risks and Hazards</li> <li>5. Role of Insurance in Social and Economic Development</li> <li>6. Classes of Insurance</li> <li>7. Growth and Evolution of Insurance Industry in India</li> <li>8. Unique Characteristics of Insurance Business</li> <li>9. Managing Risks</li> <li>10. Introduction into Insurance Funds</li> <li>11. Trustees in Insurance Business</li> <li>12. Reinsurance</li> <li>13. Linking Insurance with Social Security</li> </ol>
2	<b>The Insurance Contract</b>
	<ol style="list-style-type: none"> <li>1. Utmost Good Faith or Uberrima Fides</li> <li>2. Insurable Interest</li> <li>3. Insurer's Insurable Interest</li> <li>4. Criminal Acts</li> <li>5. Indemnity</li> <li>6. Subrogation and Contribution</li> <li>7. Proximate Cause</li> <li>8. Personal and Non-Personal Contracts</li> <li>9. Distinguishing Insurance Contracts with other contracts</li> <li>10. Insurance Terminology- First Premium- Renewal- Mode- Limited Payment- Policies- Single Premium- Convertible- Days of Grace- Lapse- Paid Up Policy- Revival- Deferment Period- Nomination- Assignment- Bonus- Arbitration</li> </ol>
3	<b>Insurance Products</b>
	<ol style="list-style-type: none"> <li>1. Life Insurance Products including Government Schemes</li> <li>2. Introduction to Non-Life Insurance, Fire, Loss of Profits, Marine , Marine Cargo, Motor and Miscellaneous</li> <li>3. Personal, Accident, Hit and Run Cases, Aviation, Health etc</li> <li>4. Insurance Policy and Documents- Certificates of Insurance, Open Policy, Floater, Franchise, Coinsurance</li> <li>5. Compensation under Insurance- Total Loss- Actual or Constructive Loss- Bonus- Replacement- Policy value- Agreed value- Full value- First Loss- Increased value</li> </ol>
4	<b>The Insurance Market</b>

	<ol style="list-style-type: none"> <li>1. Life and Non-Life Insurers- Reinsurers- Individual and Corporate Agents- Brokers- Surveyors- Medical Examiners- Third Party Administrators</li> <li>2. IRDA- Insurance Councils- Ombudsmen- Educational Institutes- Councils- Tariff Advisory Committee</li> <li>3. Career Opportunities in Insurance Business Ethical Aspects of Insurance Business</li> </ol>
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**References:**

1. Kew John, Business Environment: Managing in a Strategic Context, Jaico Publications 2006.
2. Hanke John K, Business Forecasting, Prentice Hall India, 2002.
3. Paul Justin, Business Environment, Tata McGraw Hill, 2008.
4. Butter David, Business Planning: A Guide to Business Start-up, Butterworth Heinemann, 2003.
5. Piramal Gita, Business Legends, Penguin Books, 1998.
6. Hitt Michael A, Strategic Management, Cengage Learning, 2016.
7. Zeithaml, Valarie A, Services Marketing, McGraw Hill Education, 2011.
8. Gupta S L, Retailing & E- tailing, International Book House, New Delhi, 2011.
9. Raghuram G, Logistics & Supply Chain Management: Cases and Concepts, Macmillan Business Books.
10. Joseph P T, E-Commerce an Indian Perspective, Prentice Hall India, 2015.

**Insurance Business I**  
***Question Paper Pattern***  
***(Academic Year: 2022-2023)***

**I. Cumulative Continuous Assessment (CCA)**

- Written test on concept clarity for **10 marks** where the learners need to answer within two lines the concepts meant for testing for e.g.-words like invoice, tender, entrepreneur, examples of private sector, public sector, private companies.
- Individual project for **5 marks** about Role of business in a growing economy. Faculty members could identify 15 to 20 topics and ask the learners to choose from, For example:
  1. Industrial revolution of the 18th century compared with the revolution in the 19<sup>th</sup>, 20th century.
  2. Trade across the world during different time frame
  3. Banking reforms in India during last 100 years
  4. Retail revolution in the developed countries
  5. Relevance of make In India
  6. Aviation sector – past, present and future
  7. Fruits of Liberalization-A comparison of 20 years prior to 1991 and 20 years
  8. Mergers and demergers in Indian public sector banks-last 50 years
  9. Laws relating to NPAs in India
  10. International trade-what? Why? And How?

As it is individual projects related to the syllabus, the learner may be tested for originality by making them answer one or two questions on the topic while accepting the submission.

- **Ten marks** for group projects-This may cover successful businesses, start up space, Failure of business houses, Unethical practices found in business firms and many more. The evaluation shall be on the basis of project presentation. Rubrics may be developed and communicated.
- **Ten marks** for any other criteria to be specified by the faculty (including attendance) It is suggested that 5 marks be given for maintaining a commerce diary where weekly record of business events are recorded and suitable observations are made by the learner.  
**Five marks** for a scrap book which will have a collection of forms and procedure used in everyday transactions such as, credit card details, NEFT procedure, Face of cheque, Precaution while using ATM, meaning of banking code, innovative payment mechanisms etc. The contents of the scrap book may be divided as per the syllabus of 2 semesters.
- The scheme of marking is authorized by the HOD and sanctioned by the Principal.

- Scheme of marking needs to be elaborate with the rubrics and should be enclosed with the instructions to be given to the learner about the CCE programme.
- The document to be submitted to the Exam wing well in advance preferably within 2 to 3 weeks after the commencement of the semester.

**Total: 40 marks**

## II. Semester End Examination (SEE)- 60 Marks

Maximum Marks                      60

Duration                                : 2 Hours

Note: (1) All questions are Compulsory.

Question No.	Particulars (Nature of Questions)	Marks
Q-1 (Module-I)	Answer any 2 out of 3 a) b) c)	12
Q-2 (Module-II)	Answer any 2 out of 3 a) b) c)	12
Q-3 (Module-III)	Answer any 2 out of 3 a) b) c)	12
Q-4 (Module-IV)	Answer any 2 out of 3 a) b) c)	12
Q-5	A) Experience based question based on the various projects presented in the class by the learner / Case Study OR B) Write short notes on( Any 3 out of 4) Based on entire syllabus	12
<b>Total</b>		<b>60</b>

# Syllabus of courses of F.Y. B. Com (Actuarial Studies)

With effect from the  
Academic Year 2022-2023

*Discipline Related Elective (DRE) Courses*

Course Code 30103

**Business Economics – I (3 Credits)**

## **Instructional Objectives:**

- To sensitize the learners the need for optimum utilization of scarce resources.
- To familiarize the learners with the basic tools used for understanding production and consumption.
- To make them understand the interplay between market forces and optimum use of resources.
- To enable the learners about cost output relationship.

## **Learning Outcomes:**

- Learners understand the concept of consumer demand and be able to analyze it using demand forecasting.
- Learners Explain consumer behaviour using ordinal utility analysis and be able to apply in the analysis of a variety of public policy issues.
- Learners Differentiate between various types of costs and also be able to illustrate the cost-output relationship in the short-run and long-run.
- Learners identify and plan to achieve economies of scale.

## **Semester I**

### **Modules at a Glance**

<b>Business Economics-I</b>		
<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Principles of Economics	15
2	Consumer Behaviour Theory	15
3	Supply side Decisions	15
4	Market Behaviour	15
<b>Total No. of Lectures:</b>		<b>60</b>

Sr. No.	Modules
<b>Unit I</b>	<b>Principles of Economics</b>
	<ul style="list-style-type: none"> <li>● Concept of Scarcity, Choices and Opportunity Cost</li> <li>● The role of price mechanism in a free market. Market equilibrium quantity and price- factors that influence the market demand and supply.</li> <li>● Elasticities of demand and price elasticity of supply- factors that affect elasticity (Calculate elasticities of demand using both original and average quantities)</li> <li>● Price expectations and speculation</li> </ul>
<b>Unit II</b>	<b>Consumer Behaviour Theory</b>
	<ul style="list-style-type: none"> <li>● Ordinal Utility theory (Indifference curve approach): Consumer's preferences</li> <li>● Indifference curves; Budget line; Consumer's equilibrium (necessary and sufficient conditions)</li> <li>● Concepts of rational choice, perfect information and irrational behaviour in behavioural Economics</li> </ul>
<b>Unit III</b>	<b>Supply side Decisions</b>
	<ul style="list-style-type: none"> <li>● <b>Production function:</b> short run analysis with Law of Variable Proportions; Long run production function - Laws of Returns to Scale.</li> <li>● Cost Output Relationship in the Short Run and Long Run</li> <li>● Economies of Scale</li> <li>● Break even analysis</li> <li>● Revenue: Marginal and Average- Interrelationship of revenue and cost- how price is determined- average cost pricing; multiple product pricing</li> </ul>
<b>XUnit IV</b>	<b>Market Behavior</b>
	<ul style="list-style-type: none"> <li>● <b>Perfect Competition:</b> Features; Equilibrium of the firm in the short run and long run.</li> <li>● <b>Monopoly:</b> Barriers to entry, Short-run and long-run equilibrium of monopoly firm- Price discrimination</li> <li>● <b>Monopolistic Competition:</b> Features; effects of advertising on demand.</li> <li>● <b>Oligopoly</b> and interdependence- collusive oligopoly</li> </ul>

## **References:**

1. Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi).
2. Hirchey.M., Managerial Economics, Thomson South Western.
3. Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore).
4. Frank R.H, Bernanke.B.S., Principles of Economics (Tata McGraw Hill).
5. Gregory Mankiw., Principles of Economics, Thomson South Western.
6. Samuelson & Nordhas.: Economics (Tata McGraw Hills, New Delhi).
7. Pal Sumitra, Managerial Economics cases and concepts (Macmillan, New Delhi).





# Syllabus of courses of F.Y. B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

Ability Enhancement Courses (AECC)

Course Code 30104

Business Communication

## Instructional Objectives:

- To equip the learner with a communication process enabling them to comprehend instruction.
- To develop effective spoken language skills so as to enable learners to speak confidently. Interpersonally as well as in groups.
- To familiarise the learner with the nuances of corporate communication.
- To make the learner understand the special features of social media and the care to be taken while using social media.

## Course Outcome:

- The learner is trained to be a critical listener.
- The learner is able to write and communicate effectively.
- The learner uses social media and other online communication channels effectively.
- The learner identifies the barriers to effective communication and develops skills to break the barriers.

## Semester I Modules at a Glance

Business Communication-I		
Sr. No.	Modules	No. of Lectures
1	Theory of Communication	15
2	Obstacles to Communication in Business World	15
3	Business Correspondence	15
4	Language and Writing Skills	15
Total No. of Lectures:		60

Sr. No.	Modules
1	<b>Theory of Communication</b>
	<ul style="list-style-type: none"> <li>● <b>Concept of Communication:</b> Meaning, Definition, Process, Need, Feedback, and impact of technological advancements on communication.</li> <li>● <b>Channels and Instructional Objectives of Communication:</b> Channels: Formal and Informal, Vertical, Horizontal, Diagonal and Grapevine.</li> <li>● <b>Objective of Communication:</b> Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees.</li> <li>● <b>Methods and Modes of Communication:</b></li> <li>● Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication.</li> <li>● Modes: Telephone, Computers and E- communication, Video and Satellite Conferencing, Social media.</li> </ul>
2	<b>Obstacles to Communication in Business World, Listening and Communication Etiquette</b>
	<ul style="list-style-type: none"> <li>● <b>Problems in Communication /Barriers to Communication:</b></li> <li>● Physical/ Semantic/Language / Socio-Cultural / Psychological Barriers, ways to overcome these barriers.</li> <li>● <b>Listening:</b> Importance of Listening Skills, Process of listening, cultivating good Listening Skills, types of listening skills.</li> <li>● <b>Communication etiquette:</b> Etiquette of letter writing, E-mail etiquette, Telephone etiquette, Social media etiquette, corporate etiquette.</li> </ul>
3	<b>Business Correspondence</b>
	<ul style="list-style-type: none"> <li>● <b>Theory of Business Letter Writing and Email:</b> Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing, Principles of effective Email Writing, Email Drafting- regular office correspondence.</li> <li>● <b>Personal Correspondence:</b> Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of Job Offer, Letter of Resignation [Letter of Appointment, Promotion and Termination, Letter of Reference, Letter of Refusal, office circular, office order, Memo - to be taught but not to be tested in the examination.</li> </ul>
4	<b>Language and Writing Skills</b>
	<p><b>A. Paragraph Writing:</b> Developing an idea, using appropriate linking devices, etc. Cohesion and Coherence, self-editing, etc. [Interpretation of technical data, Composition on a given situation etc.]</p> <p><b>B. Activities (Tutorial)</b></p> <ul style="list-style-type: none"> <li>● Speaking Skills: Telephonic communication, Debate, Dialogue and Speeches.</li> <li>● Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling and punctuation.</li> <li>● Use of mobile-based dictionary.</li> </ul>

## **References:**

1. Raman Meenakshi and Singh Prakash. *Business Communication*. Oxford University Press, 2007. 24x19 - 275 PB 0-19-567695-5, Meenakshi X45.
2. Deshmukh Sandeep. *Group Communication: Theory and Methods*. Ane Books India, 2008. 22x15 - 495 HB 81-8052-146-X, Sandeep X45.
3. Riel Cees B.M. *Essentials of Corporate Communication: Implementing Practices for Effective Reputation Management*. 23x15 - 495 PB 0-415-32826-8, Riel, Cees B.M. X45.
4. Bhatia R.C. *Business Communication*. Ane Books India, 2008. 24x18 - 250 PB 81-8052-016-1, Bhatia, R. C. X45.
5. Ober Scat. *Contemporary Business Communication (with CD)*. Bizatantra , 2005. 26x20 - 349 PB 81-7722-522-7. Scat X45.
6. Kumar Raj. *Basic Business Communication ( With CD # C01130 ) : Concepts, Applications and Skills*. Excel Books, 2010. 295 PB 978-81-7446-866-6, Kumar Raj X45.
7. Lesikar, Raymond.V., Pettit John D and Flatley Marie . *Basic Business Communication*. Richard D. Irwin, INC. 1993. 26x20c.m. HB 0 256 10936 2, Lesikar, R.V. X:8(22).
8. Naterop, B. Jean and Revell, Rod. *Telephoning in English*. Cambridge University. 2007. 24x18 + C00942 - C00943 - 375 PB 0-521-70893-1, B. Jean X45.

## **Suggested List of MOOC**

1. <https://www.mooc-list.com/tags/communication-skills>.
2. <https://www.mooc-list.com/.../effective-communication>.
3. <https://www.mooc-list.com/tags/business-communication>.
4. <https://www.skilledup.com/.../learn-communications-online-free>.
5. <http://www.about.com/Communication+Skills+List>.

## **Courses:**

1. <https://www.coursera.org/learn/management-leadership-english#>
2. <https://www.coursera.org/learn/business#>
3. <https://www.coursera.org/learn/powerpoint-presentations>.

# Business Communication

## Paper I

### *Question Paper Pattern*

*(Academic Year: 2022-2023)*

#### I. Tutorial Activity: 40 Marks

##### Semester I

Particulars	Marks
Reading newspaper articles in class and discussing the same	10
SWOC – Self Analysis of the learner	10
Paragraph Writing	5
Report writing	15
Total	40

#### II. Semester End Examination (SEE): 60 Marks

Maximum Marks

60

Duration

: 2 Hours

Note: (1) All questions are compulsory.

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
Q-1 (Module -I & II)	Essay type question – Any 2 out of 4	20/15
Q-2 (Module -III)	Job Application and Resume Writing (Fresher/Experience) –Any 1 out of 2	10/15
Q-3 (Module -IV)	Letter Writing (SOP, Job Acceptance, Job Resignation, e-mail) – Any 2 out of 4	15
Q-4 (Module-I & II)	Short Notes – Any 3 out of 5	15
	<b>Total</b>	<b>60</b>

# Syllabus of courses of F.Y. B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Ability Enhancement Compulsory Courses (AECC)*

**Course Code 30105**

**Environmental Studies I (3 Credits)**

## **Instructional Objectives:**

- To make the learner understand the need for a sustainable environment.
- To sensitize the interface between population and related issues w.r.t development, urbanization and migration.
- To sensitize the learners on effective resource utilization.
- To make them aware about the concept of Thematic maps.

## **Learning Outcomes:**

- The learner will be able to understand the key environmental concepts and will be able to orient themselves towards better utilization of natural resources.
- The learner will become more aware about problems of urbanization and population explosion.
- The learner appreciates and adopts alternate cheaper and eco-friendly sources of resources.
- The learner will be able to make Thematic maps.

## **Modules at a Glance**

<b>Environmental Studies-I</b>		
<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Environment and Ecosystem	13
2	Natural Resources and Sustainable Development	13
3	Populations and Emerging Issues of Development	13
4	Urbanization and Environment	13
5	Reading of Thematic Maps and Map Filling	08
<b>Total No. of Lectures:</b>		<b>60</b>

Sr. No	Modules
1.	<b>Environment and Ecosystem</b>
	Environment: Meaning, definition, scope; Various spheres of environment (Atmosphere, lithosphere, hydrosphere and biosphere), Layers of atmosphere; concept of an ecosystem: definition, Characteristics, components and types, functioning and structure; Food Chain and Food Web- Ecological Pyramids- Man and environment Relationship; Importance and scope of Environmental Studies.
2.	<b>Natural Resources and Sustainable Development</b>
	Meaning and definitions; Classification and types of resources, factors influencing resource utilization; Resource conservation-meaning and methods - conventional and non-conventional resources, problems associated with and management of water, forest and energy resources- resource utilization and sustainable development.
3.	<b>Populations and Emerging Issues of Development</b>
	Population explosion in the world and in India and arising concerns- Demographic Transition Theory-pattern of population growth in the world and in India and associated problems-Measures taken to control population growth in India; Human population and environment- Environment and Human Health-Human Development Index – The World Happiness Index.
4.	<b>Urbanisation and Environment</b>
	Concept of Urbanisation-Problems of migration and urban environment - changing land use, crowding and stress on urban resources, degradation of air and water, loss of soil cover impact on biodiversity, Urban heat islands- Emerging Smart Cities and safe Cities in India - Sustainable Cities.
5.	<b>Reading of Thematic Maps and Map Filling (Practical Component)</b>
	Reading of Thematic Maps (4 Lectures). Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Picograms- Only reading and interpretation. Map Filling: (4 Lectures). Map filling of World (Environmentally significant features) using point, line and polygon segment.

## **References:**

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India, Email:mapin@icenet.net.
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18. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R).
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21. Indian Ecotourism: Environmental Rules and Regulations” by Ratandeep Singh.
22. Ecotourism and Sustainable Development” by Ravishanker Singh.
23. K. Agarwal et al (1996) Biodiversity and Environment, APH, Dehra Dun.
24. S.S. Negi (1993) Biodiversity and its Conservation in India, Indus Publications, New Delhi.
25. W.W. Collins and C.O. Qualset (1998) Biodiversity in Agro-ecosystem, CRC, Boston.
26. V.K. Krishnamurthy (2003) Text Book of Biodiversity, Science Publisher, Chennai.
27. Bharucha Erach, Textbook of Environmental Studies for Undergraduate Courses, Universities Press, 2005.

# Environmental Studies I

## Semester I

### *Question Paper Pattern*

*(Academic Year: 2022-2023)*

#### **Cumulative Continuous Assessment (CCA)**

- I. Class test : 10 marks**
- II. Map practice work/ Exhibition : 10 marks**
- III. Project / Field Work : 20 marks**

Project/Field Work shall include:

- a. Composting
- b. E-waste management
- c. Tetra pack management
- d. Field tours/ Nature trails
- e. Beach clean up
- f. Group assignments/projects
- g. Case studies
- h. Article review
- i. Book review
- j. visit to a solid waste/ medical waste/ e-waste recycling unit
- k. Industrial visit
- l. Visit to an NGO
- m. Debate club
- n. Documentary review
- o. Plastic waste management
- p. Case studies related to other projects mentioned above (National/International level)
- q. Swachh Bharat Abhiyaan (in different areas)
- r. Develop a game for waste management/green campus/environmental conservation
- s. Best out of Waste Project
- t. Environmental / Green Audit.

**Total: 40 marks**



**IV. Semester End Examination (SEE)- 60 Marks**

Maximum Marks 60

Duration : 2 Hours

Note: (1) All questions are compulsory, subject to internal choice.

(2) Draw diagrams wherever necessary.

(3) Figures to the right indicate full marks.

<b>Question No.</b>	<b>Particulars (Nature of Questions)</b>	<b>Marks (To Be Attempted)</b>
Q-1	A) Map filling- Mumbai Map (05 Marks) B) Map filling- Konkan Map (05 Marks)	10
Q-2 (Module-I)	Attempt Any 2 A) B) C)	10
Q-3 (Module-II)	Attempt Any 2 A) B) C)	10
Q-4 (Module-III)	Attempt Any 2 A) B) C)	10
Q-5 (Module IV)	Attempt Any 2 A) B) C)	10
Q-6	Write a short notes (Any Two) a. From Unit-I b. From Unit-II c. From Unit-III d. From Unit-IV	10
	<b>Total</b>	<b>60</b>

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Skill Enhancement Course (SEC)*

Course Code 30106

## Foundation Course I (2 Credits)

### Instructional Objectives:

- To help the learner understand the interdisciplinary approach of social fabric, appreciate unity in diversity.
- To sensitize learners on the socio-economic concerns in India with specific focus on the issues of the youth.
- To help learners articulate their views on contemporary social issues.
- To make them recognize existing inequalities and ways to correct them.

### Course Outcome:

- The successful completion of course will enable the learner to understand factual aspects and the fabric of Indian society.
- It will help create awareness and empathy among learners about various issues faced by youth.
- It will help ingrain a sense of social responsibility and participatory approval towards society.
- The learners devise means and methods for peaceful co-existence.

### Semester I Modules at a Glance

Foundation Course – I		
Sr. No.	Modules	No. of Lectures
1	Indian Society- Unity in Diversity and Conflicts	11
2	Social issues and problems	11
3	Mental Issues among the Youth	11
4	Understanding oneself, Stress and conflict management	12
Total No. of Lectures:		45

Sr. No.	Modules / Units
<b>1</b>	<b>Indian Society – Unity in Diversity and conflicts</b>
	<p>Concept of diversity vs difference, Understand the multi-cultural diversity of Indian society through its demographic composition Inequalities and inter group conflicts arising due to Linguistic differences –Causes and Remedies.</p> <p>Religious diversity-Causes and Remedies.</p> <p>Caste system as a social evil</p> <p>Naxalism- Affirmative action taken by the government to address the issue</p> <p>Regionalism- Causes and Remedies.</p>
<b>2</b>	<b>Social issues and problem</b>
	<p>Understand the concept of disparity as arising out of stratification and inequality; Explore the disparities arising out of gender with special reference to violence against women, female foeticide (declining sex ratio), and portrayal of women across all forms of media; Appreciate the inequalities faced by people with disabilities and understand with sensitivity the issues of people with physical and mental disabilities, mental ill health, sensitivity towards third gender.</p>
<b>3</b>	<b>Mental Issues among the Youth</b>
	<p>Peer pressure, Bullying, Substance dependency/addiction, Abuse (Physical, verbal, sexual and emotional), Suicidal ideation, Insomnia/Hypersomnia, Binge eating/Bulimia, Insufficient social skills, Childhood trauma, Academic pressure, Inequality among siblings and comparison with peers.</p>
<b>4</b>	<b>Understanding oneself, Stress and conflict management</b>
	<p>Defining self and Personality development; determinants of Personality development; agents of socialisation and roles played by them in Individual development, Maslow’s theory of self-actualisation.</p> <p>Meaning of stress ; it’s causes and Coping mechanisms for managing stress,</p> <p>Meaning of conflict; Its causes and response in society.</p>

**References:**

1. Indian Society and Culture, Vinita Padey, Rawat Pub (2016).
2. Social Problems in India, Ram Ahuja, Rawat Pub (2014).
3. Faces of Feminine in Ancient, medieval and Modern India, Mandakranta Bose Oxford University Press.
4. National Human rights commission- disability Manual.
5. Rural, Urban Migration: Trends, challenges & Strategies, S Rajagopalan, ICFAI- 2012.
6. Regional Inequalities in India Bhat L SSSRD- New Delhi.
7. Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014).
8. The Constitution of India, P M Bakshi (2011).
9. The Problems of Linguistic States in India, Krishna Kodesia Sterling Pub.
10. Politics in India: structure, Process and Policy Subrata Mitra, Routledge Pub.
11. Politics in India, Rajani Kothari, Orient Blackswan.
12. Problems of Communalism in India, Ravindra Kumar Mittal Pub.
13. Combating communalism in India: Key to National Integration, Kawal Kishor Bhardwaj, Mittal Pub.

**Foundation Course I**  
**Semester I**  
*Question Paper Pattern*  
*(Academic Year: 2022-2023)*

**I. Cumulative Continuous Assessment (CCA)**

1) Project I (20 Marks)

2) Project II (20 Marks)

**II. Semester End Examination (SEE) 60 Marks**

Maximum Marks                      60

Duration                                      : 2 Hours

Note: (1) All questions are compulsory.

(2) Attempt **any two out of three sub questions** from each question.

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
Q-1 (Module-I)	A) Full Length Question B) Full Length Question C) Reflective Question	15
Q-2 (Module-II)	A) Full Length Question B) Full Length Question C) Reflective Question	15
Q-3 (Module-III)	A) Full Length Question B) Full Length Question C) Reflective Question	15
Q-4 (Module-IV)	A) Full Length Question B) Full Length Question C) Reflective Question	15
<b>Total</b>		<b>60</b>

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

Core Courses (CC)  
Course Code 30107  
Financial mathematics ( 3 Credits)

## Instructional Objectives:

- To orient the learners about financial mathematics in general.
- To build a strong foundation of simple interest, its calculation as well as distinguish between compound interest and its formulation.
- To give learners a fair idea about terms used in finance as an applied component.
- To lay foundations for the net component of valuation under finance and portfolio mix.

## Learning Outcomes:

- The learner becomes confident of applying mathematical and statistical tools.
- The learner is able to understand the nuances of SIP and other investment avenues.
- The learner appreciates the importance of portfolio management.
- The learners become curious about the finance, mathematics interface.

## Semester I

### Modules at a Glance

Financial Mathematics		
Sr. No.	Modules	No. of Lectures
1	Interest and Annuity	15
2	Application of Time Value of Money	15
3	Shares and Mutual Funds	15
4	Decision and Management of investments	15
Total No. of Lectures:		60

Sr. No	Modules
1	<b>Interest and Annuity</b>
	<ul style="list-style-type: none"> <li>● Simple Interest, Problems on Simple Interest</li> <li>● Compound Interest, Problems on Simple Interest</li> <li>● Sum of the Series</li> <li>● Arithmetic Progression (AP), Geometric Progression (GP) Sum of AP, Sum of GP</li> </ul>
2	<b>Application of Time Value of Money</b>
	<ul style="list-style-type: none"> <li>● Present Value, future value, Simple interest, compound interest, force of interest, monthly interest rate, Real and Money rate of interest, Nominal and Effective Rate of interest, equation of value, Determinants of interest rate</li> <li>● Introduction- Concept of Annuity, Discounting and accumulating, Classification of Annuities, Amount of an ordinary annuity, Present Value of an ordinary annuity, Amount of an annuity due, Present value of an annuity due.</li> <li>● Amount of a deferred, non level, payable monthly annuity, and sinking fund, Perpetual Annuity. Arithmetic increasing/decreasing annuity, geometric increasing/decreasing annuity, term of annuity.</li> <li>● For each of the following types of annuity/cash flows, given sufficient information of immediate or due, present value, future value, current value, interest rate, payment amount, and term of annuity, calculate any remaining item. Level annuity, finite term. Level perpetuity. Non-level annuities/cash flows. Arithmetic progression, finite term and perpetuity. Geometric progression, finite term and perpetuity. Other non-level annuities/cash flows.</li> <li>● Amortization, Leasing, Capital Expenditure and Bonds Definitions of the following terms: price, book value, amortization of premium, accumulation of discount, redemption value, par value/face value, yield rate, coupon, coupon rate, term of bond, callable/non-callable, call price, call premium. Given sufficient partial information about the items listed below, calculate any of the remaining items Price, book value, amortization of premium, accumulation of discount. (Note that valuation of bonds between coupon payment dates will not be covered). Redemption value, face value. Yield rate. Coupon, coupon rate. Term of bond, point in time that a bond has a given book value, amortization of premium, or accumulation of discount.</li> </ul>

	<p>Calculate the price of a callable bond to achieve a specified minimum yield.</p> <ul style="list-style-type: none"> <li>● Loan Repayment: Definitions of the following terms: principal, interest, term of loan, outstanding balance, final payment (drop payment, balloon payment), amortization.</li> <li>● Calculate: The missing item, given any four of: term of loan, interest rate, payment amount, payment period, principal. The outstanding balance at any point in time. The amount of interest and principal repayment in a given payment. Similar calculations to the above when refinancing is involved.</li> </ul>
<b>3</b>	<b>Shares and Mutual Funds</b>
	<ul style="list-style-type: none"> <li>● Introduction- Concept of share, face value, market value, dividend, equity shares, preferential shares, bonus shares, Rights issues Problems based on these concepts, pricing using dividend discount model.</li> <li>● Mutual funds: Simple problems on calculations of Net income after considering entry load, Dividend, change in Net Asset value (NAV) and Exit Load Averaging of price under the Systematic Investment Plans (S.I.P).</li> </ul>
<b>4</b>	<b>Decision and Management of investments</b>
	<ul style="list-style-type: none"> <li>● Bonds: price, book value, amortization of premium, accumulation of discount, redemption value, par value/face value, yield rate, coupon, coupon rate, term of bond, callable/non-callable</li> <li>● Debt instruments.</li> <li>● Valuation and Portfolio Mix.</li> </ul>



**Reference :**

1. Mathematics for Economics and Finance Methods and Modelling by Martin Anthony and Norman Biggs, Cambridge University Press, Cambridge low-priced edition, 2000, Chapters 1, 2, 4, 6 to 9 & 10.
2. Applied Calculus: By Stephen Waner and Steven Constenoble, Brooks/Cole Thomson Learning, second edition, Chapter 1 to 5.
3. Business Mathematics By D. C. Sancheti and V. K. Kapoor, Sultan Chand & Sons, 2006, Chapter 1, 5, 7, 9 & 10.
4. Mathematics for Business Economics: By J. D. Gupta, P. K. Gupta and Man Mohan, Tata Mc-Graw Hill Publishing Co. Ltd., 1987, Chapters 9 to 11 & 16.
5. Quantitative Methods-Part-I By S. Saha and S. Mukerji, New Central Book Agency, 1996, Chapters 7 & 12.
6. Mathematical Basis of Life Insurance By S.P. Dixit, C.S. Modi and R.V. Joshi, Insurance Institute of India, Chapters 1 and 2.
7. Securities Laws & Regulation of Financial Market: Intermediate Course Paper 8, Institute of Company Secretaries of India, Chapter 11.
8. Investments By J.C. Francis & R.W. Taylor, Schaum's Outlines, Tata Mc-Graw Hill Edition 2000, Chapters 2, 4 & section 25.1.
9. Indian Mutual Funds Handbook: By Sundar Shankaran, Vision Books, 2006, Sections 1.7, 1.8.1, 6.5 & Annexures 1.1 to 1.3.
10. STATISTICS by Schaum Series.
11. Operations Research by Gupta and Kapoor.
12. Operations Research by Schaum Series.
13. Fundamentals of Statistics - D. N. Elhance.
14. Statistical Methods - S.G. Gupta (S. Chand & Co.
15. Statistics for Management - Lovin R. Rubin D.S. (Prentice Hall of India).
16. Statistics - Theory, Method & Applications D.S. Sancheti & V. K. Kapoor.
17. Modern Business Statistics - (Revised) - B. Pearles & C. Sullivan - Prentice Hall of India.
18. Business Mathematics & Statistics : B Aggarwal, Ane Book Pvt. Limited.
19. Business Mathematics : D C Sancheti & V K Kapoor, Sultan Chand & Sons.

20. Business Mathematics: A P Verma, Asian Books Pvt.: Limited.
21. Statistics of Management, Richard Levin & David S. Rubin, Printice Hall of India ,  
New Delhi.
22. Statistics for Business & Economics, David R Anderson, Dennis J  
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23. Business Statistics , Bharadwaj , Excel Books, Delhi.
24. Business Mathematics, S.K Singh & J.K Singh, Brijwasi Book Distributor & Publisher.
25. Mathematics for Economics and Finance, Martin Anthony, Norman Biggs,  
Cambridge low price editions, 2000.
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27. Mathematics of Finance 2nd Edition Schaum's Outline Series Peter Zima,  
Robert Browns Tata McGraw-Hill Publishing Company Ltd.

**Financial Mathematics I**  
**Semester I**  
**Question Paper Pattern**  
**(Academic Year: 2022-2023)**

- I. Tutorial Test I : 15 marks  
 II. Tutorial Test II : 15 marks  
 III. Class Participation & Attendance : 10 marks

**Total: 40 marks**

**IV. Semester End Examination (SEE)- 60 Marks**

Maximum Marks : 60  
 Number of Questions to be Set : 5 (Five)  
 Duration : 2 Hours

Note: (1) All questions are compulsory.  
 (2) Attempt **any three out of four sub questions** from each question.

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
Q-1 (Module-I)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-2 (Module-II)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-3 (Module-III)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-4 (Module-IV)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
<b>Total</b>		<b>60</b>

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Discipline Specific Elective (DSE) Courses*

Course Code 30201

## Accountancy and Financial Management II (3 Credits)

### Instructional Objectives:

- To acquaint learners with the knowledge of Scope and Importance of Financial Management and familiarize them with various terms.
- To acquaint learners with the various methods and the importance of analyzing the financial statements of an entity.
- To acquaint learners with the different ratios used in financial statements analysis by a stakeholder in a decision-making process about an entity.
- To make the learner aware about the sources of finance and ways of raising finance.

### Learning Outcome:

- The Learners appreciate the role of financial management and actually apply the concepts.
- The learners get hands-on experience in making financial statements.
- The learners read and interpret the financial statement.
- They use various tools and techniques with reference to accounting and financial statements.

## Semester II

### Modules at a Glance

Accountancy and Financial Management - Paper II		
Sr. No.	Modules	No. of Lectures
1	Introduction to Financial Management	15
2	Study of Financial Statements	15
3	Ratio Analysis	15
4	Sources of Finance and Cash Flow Analysis	15
Total No. of Lectures:		60

Sr. No.	Modules
1	Introduction to Financial Management
	<ul style="list-style-type: none"> <li>● Definition, nature and functions of financial management</li> <li>● Instructional Objectives of financial management</li> <li>● Importance of financial management and limitations.</li> <li>● Preparation of financial Statements adhering to current statutory requirements.</li> </ul>
2	Study of Financial Statements
	<ul style="list-style-type: none"> <li>● Instructional Objectives of financial statement analysis and interpretation</li> <li>● Steps involved in the analysis of financial statements</li> <li>● Comparative Statements</li> <li>● Common Size Statements</li> <li>● Trend Analysis</li> <li>● Practical Problems including Ascertainment of Missing Figures may be asked.</li> </ul>
3	Ratio Analysis
	<ul style="list-style-type: none"> <li>● Ratio Analysis– Meaning and Instructional Objectives and Classification of Ratios;</li> <li>● Traditional classification, functional classification and classification from the point of view of users • Balance Sheet Ratios- Current Ratio, Liquid Ratio, Proprietary Ratio, Stock Working Capital Ratio, Capital Gearing Ratio, Debt Equity Ratio • Revenue Statement Ratios - Gross Profit Ratio, Operating Ratio, Expense Ratios, Net Profit Ratio, Net Operating Profit Ratio, Stock Turnover Ratio. • Combined Ratios - Return on Capital Employed, Return on Proprietors’ Funds, Return on Equity Share Capital, Debtors’ Turnover Ratio (Debtors’ Velocity), Earning Per Share, Dividend Payout Ratio, Price Earnings Ratio, Debt Service Ratio, Creditors Turnover Ratio.</li> <li>● Importance and limitations of Accounting Ratios.</li> </ul>
4	Sources of Finance and Cash Flow Analysis
	<ul style="list-style-type: none"> <li>● Classification of sources of finance with reference to period, ownership and source of generation</li> <li>● Internal and external financing including choice of financial instruments</li> <li>● Cash Flow Statement – Meaning and Classification</li> <li>● Uses of Cash Flow statement</li> <li>● Preparation of Cash Flow Statement – Direct and Indirect.</li> </ul>

## **Reference:**

1. Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi.
2. Advance Accounts by Shukla & Grewal, S. Chand and Company (P) Ltd., New Delhi.
3. Advanced Accountancy by R. L Gupta and M Radhaswamy, S. Chand and Company (P) Ltd., New Delhi.
4. Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill & Co. Ltd., Mumbai.
5. Financial Accounting by Lesile Chandwichk, Pentice Hall of India Adin Bakley (P) Ltd.
6. Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech. Publishing Co. Ltd., Mumbai.
7. Financial Accounting by P. C. Tulsian, Pearson Publications, New Delhi Accounting Principles by Anthony, R.N. and Reece J.S., Richard Irwin Inc.
8. Financial Accounting by Monga, J.R. Ahuja, Girish Ahujaand Shehgal Ashok, Mayur Paper Back.
9. Compendium of Statement & Standard of Accounting, ICAI. Indian Accounting Standards, Ashish Bhattacharya, Tata Mc. Grow Hill & Co. Ltd., Mumbai.
10. Financial Accounting by Williams , Tata Mc. Grow Hill & Co. Ltd., Mumbai.
11. Company Accounting Standards by Shrinivasan Anand, Taxman.
12. Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.
13. Introduction to Financial Accounting by Horngren, Pearson Publications.
14. Financial Accounting by M. Mukherjee.M. Hanif. Tata McGraw Hill Education Private Ltd; New Delhi.

## Accountancy & Financial Management: Semester II

### *Paper Pattern (Academic Year: 2022-2023)*

#### Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration : 2 Hours

Note: (1) Question No. 1 and 5 are Compulsory

(2) Attempt any Two Questions from the remaining Q. No. 2, 3 & 4.

(3) All questions carry 15 marks each

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
1.	Concept /Application Based Questions (3 Marks Each) To be given : Seven To be attempted : Any Five	15
2.	Practical Question/s (*)	(15 x 2) = 30
3.	Practical Question/s (*)	
4.	Practical Question/s (*)	
5 (A)	Attempt any three out of five sub questions given (2 marks each)	6
5 (B)	Short Notes: Attempt any three out of five given (3 marks each)	9
<b>Total</b>		<b>60</b>

\*Note – Q. No. 2, 3 & 4 may be divided into sub questions of 10/5, 8/7 or 5/5/5 marks each.

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Discipline Related Elective (DRE) Courses*

Course Code 30202

Insurance Business –II (3 Credits)

## **Instructional Objectives:**

- To ensure basic understanding and knowledge of Life Insurance Business.
- To create awareness and understanding of an array of Health Insurance products.
- To impart information on actuarial valuation of annuities and Group Insurance Schemes.
- To make the learner knowledgeable about health insurance and the special features.

## **Learning Outcomes:**

- The learners become aware of organizational aspects of insurance.
- The learners become conversant about valuation for various plans of Life Insurance.
- The learners analyze different schemes and devise the link with annuities.
- The learners recognize the present position of health insurance in India and estimate the scope for the same in future.

## **Semester II**

### **Modules at a Glance**

<b>Insurance Business –II (Life and other Contingencies)</b>		
<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Life Insurance Organization	15
2	Introduction to Actuarial Valuation	15
3	Annuities	15
4	Introduction to Health Insurance	15
<b>Total No. of Lectures:</b>		<b>60</b>



Sr. No.	Modules
1	<b>Life Insurance Organization</b>
	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Approaches to Life Insurance- The Indian Context</li> <li>3. Internal Organization</li> <li>4. The Distribution System</li> <li>5. Appointment of Agents</li> <li>6. Functions of Agents</li> <li>7. Agency continuation and termination</li> <li>8. Remuneration to Agents</li> <li>9. Trends in Life Insurance</li> <li>10. Distribution Channels</li> <li>11. Premiums and Bonuses</li> <li>12. Net and Pure Premium</li> <li>13. Premium Calculation</li> <li>14. Lapse and Revival- Special Revival Scheme- Installment Revival Scheme- Loan-cum- Revival Scheme</li> <li>15. Assignment, Nomination</li> </ol>
2	<b>Introduction to Actuarial Valuation</b>
	<ol style="list-style-type: none"> <li>1. Describe the similarities and differences between the long-term coverages</li> <li>2. Describe the appropriate models to be used to calculate expected present values, premiums or contributions, and reserves for each long-term coverage</li> <li>3. Bonus- Simple Reversionary Bonus- Compound Reversionary Bonus- Interim Bonus.</li> <li>4. Plans of Life Insurance- Death Cover- Survival Benefit- Term Assurance- Pure Endowment- Linked</li> <li>5. Some Popular Plans</li> <li>6. Common Variations</li> <li>7. With profit and without profit policies</li> <li>8. Joint Life Policies</li> <li>9. Children Plans</li> <li>10. Variable Insurance Plans</li> <li>11. Postal Life Insurance</li> </ol>
3	<b>Annuities</b>
	<ol style="list-style-type: none"> <li>1. The nature of Annuity</li> <li>2. Immediate Annuity</li> <li>3. Deferred Annuity</li> <li>4. Group Insurance- Introduction- Meaning of Group Insurance- Types of Group Insurance Schemes</li> <li>5. Ways to meeting Gratuity Liability</li> </ol>

	<ol style="list-style-type: none"> <li>6. Group Superannuation Scheme</li> <li>7. Group Leave Encashment Schemes (GLES)</li> <li>8. Other Group Schemes</li> <li>9. Social Security Schemes</li> <li>10. Other Special Need Plans</li> <li>11. Industrial Life Insurance</li> <li>12. Married Women's Property (MWP) Act Policies</li> <li>13. Plans for Differently Abled</li> </ol>
<b>4</b>	<b>Introduction to Health Insurance</b>
	<ol style="list-style-type: none"> <li>1. Range of Products</li> <li>2. Awareness about health Contingencies</li> <li>3. Importance of Health Insurance in India</li> <li>4. Growth and Evaluation of Health Insurance Companies in India</li> <li>5. Balanced Funds</li> <li>6. Premium Holiday</li> <li>7. Annuities and Pensions</li> <li>8. Future for Health Insurance</li> <li>9. Wearables</li> <li>10. Experience rating</li> <li>11. third party administrators</li> <li>12. disease taxonomy</li> <li>13. Frequency-severity of common health insurance claims</li> <li>14. Gender based morbidity trends</li> </ol>

### **References:**

1. Kew John, Business Environment: Managing in a Strategic Context, Jaico Publications 2006.
2. Hanke John K, Business Forecasting, Prentice Hall India, 2002.
3. Paul Justin, Business Environment, Tata McGraw Hill, 2008.
4. Butter David, Business Planning: A Guide to Business Start-up, Butterworth Heinemann, 2003.
5. Piramal Gita, Business Legends, Penguin Books, 1998.
6. Hitt Michael A, Strategic Management, Cengage Learning, 2016.
7. Zeithaml, Valarie A, Services Marketing, McGraw Hill Education, 2011.
8. Gupta S L, Retailing & E- tailing, International Book House, New Delhi, 2011.
9. Raghuram G, Logistics & Supply Chain Management: Cases and Concepts, Macmillan Business Books
10. Joseph P T, E-Commerce an Indian Perspective, Prentice Hall India, 2015

## **Insurance Business**

### **Paper II Question**

#### ***Paper Pattern***

***(Academic Year: 2022-2023)***

#### **II. Cumulative Continuous Assessment (CCA)**

➤ Written test on concept clarity for **10 marks** where the learners need to answer. within two lines the concepts meant for testing for e.g.-words like invoice, tender, entrepreneur, examples of private sector, public sector, private companies.

➤ Individual project for **5 marks** about Role of business in a growing economy. Faculty members could identify 15 to 20 topics and ask the learners to choose from.

For example:

1. Industrial revolution of the 18th century compared with the revolution in the 19<sup>th</sup>, 20th century.
2. Trade across the world during different time frame
3. Banking reforms in India during last 100 years
4. Retail revolution in the developed countries
5. Relevance of make In India
6. Aviation sector – past, present and future
7. Fruits of Liberalization-A comparison of 20 years prior to 1991 and 20 years
8. Mergers and demergers in Indian public sector banks-last 50 years
9. Laws relating to NPAs in India
10. International trade-what? Why? And How?

As it is individual projects related to the syllabus, the learner may be tested for originality by making them answer one or two questions on the topic while accepting the submission.

➤ **Ten marks** for group projects-This may cover successful businesses, start up space, Failure of business houses, Unethical practices found in business firms and many more. The evaluation shall be on the basis of project presentation. Rubrics may be developed and communicated

➤ **Ten marks** for any other criteria to be specified by the faculty.(including attendance) It is suggested that 5 marks be given for maintaining a commerce diary where weekly records of business events are recorded and suitable observations are made by the learner.

➤ **Five marks** for a scrap book which will have a collection of forms and procedure used in everyday transactions such as, credit card details, NEFT procedure, Face of cheque, Precaution while using ATM, meaning of banking code, innovative payment mechanisms etc.,The contents of the scrap book may be divided as per the syllabus of 2 semesters.

➤ The scheme of marking needs to be discussed with all other department members, authorized by the HOD and sanctioned by the Principal.

➤ Scheme of marking needs to be elaborate with the rubrics and should be enclosed with the instructions to be given to the learner about the CCE programme.



# Syllabus of courses of F.Y.B. Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Discipline Related Elective (DRE) Courses*

**Course Code 30203**

**Business Economics II (3 Credits)**

## Semester II

### Instructional Objective:

- To enable learners to analyse the Macroeconomic concepts.
- To make learners understand the Role of Government in an Economy.
- To orient the learner with the function of money and elements of monetary policy.
- To make learners understand the dynamics of International trade.

### Learning Outcomes:

- The learner is able to understand and identify the functioning of the Trade cycle and the determinants of Economic growth.
- The learner understands the role of the government with respect to fiscal policy.
- The learner is sensitized about the causes of inflation and appreciates the role of the government by generating employment to beat inflation.
- The learner is aware of International exchange rates and can comprehend the disequilibrium in Balance of Payment.

### Modules at a Glance

Business Economics-II		
Sr. No.	Modules	No. of Lectures
1	Macroeconomic concepts	15
2	The Role of Government in an Economy	15
3	Money, Inflation and Unemployment	15
4	International trade	15
Total No. of Lectures:		<b>60</b>

<b>Sr. No.</b>	<b>Modules</b>
<b>Unit I</b>	<b>Macroeconomic concepts</b>
	<ol style="list-style-type: none"> <li>1. National Income concepts</li> <li>2. Circular flow of aggregate income -closed and open economy models</li> <li>3. Trade Cycles: Features and Phases</li> <li>4. Determination of the price level in the economy by the interaction between Aggregate supply (AS) and aggregate demand (AD) in a simple AS–AD model. Economic growth- determinants</li> </ol>
<b>Unit II</b>	<b>The Role of Government in an Economy</b>
	<ol style="list-style-type: none"> <li>1. Relation between Efficiency, Markets and Governments</li> <li>2. The concept of Public Goods and the role of Government</li> <li>3. Fiscal Policy: Meaning, Objectives, constituents and Limitations.</li> <li>4. Impact of fiscal policy on the economy</li> </ol>
<b>Unit III</b>	<b>Money, Inflation and Unemployment</b>
	<ol style="list-style-type: none"> <li>1. Money- Function of money; Demand for money; Money Supply: Determinants of Money Supply</li> <li>2. Elements of Monetary Policy</li> <li>3. Inflation: Demand pull inflation and cost push inflation; Inflation targeting; The trade-off between Inflation and Unemployment.</li> <li>4. Supply Side Economics: Basic propositions and critical appraisal</li> </ol>
<b>Unit IV</b>	<b>International Trade</b>
	<ol style="list-style-type: none"> <li>1. Balance of Payment: Meaning, Structure</li> <li>2. Types of BOP Disequilibrium- Causes and measures to correct the disequilibrium in Balance of Payments</li> <li>3. Foreign Exchange Market: Meaning, Functions, Determination of Equilibrium Rate of Exchange.</li> <li>4. Role of Central Bank in foreign exchange rate management</li> </ol>

### **References:**

1. Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi).
2. Hirschey.M., Managerial Economics, Thomson South Western
3. Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore).
4. Frank R.H, Bernanke.B.S., Principles of Economics (Tata McGraw Hill).
5. Gregory Mankiw., Principles of Economics, Thomson South Western.
6. Samuelson & Nordhas.: Economics (Tata McGraw Hills, New Delhi).
7. Pal Sumitra, Managerial Economics cases and concepts (Macmillan, New Delhi).

## **Business Economics II**

### **Semester II**

### ***Question Paper Pattern***

***(Academic Year: 2022-2023)***

#### **I. Continuous Assessment (CA) - 40 Marks**

(i) CA-I: Test – (Objective type of questions)- 20 Marks

(ii) CA-II: Case Studies/Assignments/Industrial Visits- 20 Marks

#### **II. Semester End Examination (SEE) - 60 Marks**

Maximum Marks 60

Duration : 2 Hours

Note: (1) All Questions are compulsory

(2) All questions carry 15 marks each.

<b>Question No.</b>	<b>Particulars (Nature of Questions)</b>	<b>Marks (To Be Attempted)</b>
Q-1 (Module-I)	A) Full Length Question B) Three Short Notes (5 Marks Each) C) Application/Numerical Question	15
Q-2 (Module-II)	A) Full Length Question B) Three Short Notes (5 Marks Each) C) Application/Numerical Question	15
Q-3 (Module-III)	A) Full Length Question B) Three Short Notes (5 Marks Each) C) Application/Numerical Question	15
Q-4 (Module-IV)	A) Full Length Question B) Three Short Notes (5 Marks Each) C) Application/Numerical Question	15
	<b>Total</b>	<b>60</b>

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

## *Ability Enhancement Course (AECC)*

Course Code 30204

Business Communication II

(3 CREDITS)

### Instructional Objectives:

- To understand the effective use of powerpoint presentation.
- To understand the relevance and importance of conducting meetings.
- To teach the formats of letter writing.
- To enable the learner to adapt to the requirements of the industry.

### Learning outcomes:

- The learner learns to use statistical tools in powerpoint presentations.
- The learner learns to write letters of enquiry and letters of complaint.
- Practical application of preparing flyers and leaflets helps the learner demonstrate their creativity.
- The learner is able to write different types of reports.

## Semester II

### Modules at a Glance

Business Communication-II		
Sr. No.	Modules	No. of Lectures
1	Group Communication	15
2	Business Correspondence	15
3	Presentation Skills	15
4	Language and Writing Skills	15
Total No. of Lectures:		60



Sr. No.	Modules
1	<b>Group Communication</b>
	<p><b>Interviews:</b> Definition of interview, types of Interviews – Selection – face to face, telephonic/online, Appraisal, Grievance, Exit, Basics of job interview, preparing for a job Interview, how to use social media – job portal like timesjobs, naukari etc., professional portals like LinkedIn etc.</p> <p><b>Meetings:</b> Need and Importance of Meetings, Conduct of Meeting and Group Dynamics, Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions</p> <p><b>Conference:</b> Meaning and Importance of Conference, Organizing a Conference, Modern Methods: Video and Tele-Conferencing</p> <p><b>Public Relations:</b> Meaning, Functions of PR Department, External and Internal Measures of PR</p>
2	<b>Business Correspondence</b>
	<p><b>Trade Letters:</b> Precautions to be taken while drafting trade letters. Order, Credit and Status Enquiry, Purchase order.</p> <p><b>Only following to be taught in detail: -</b></p> <ol style="list-style-type: none"> <li>1. Letters of Inquiry and reply to inquiry.</li> <li>2. Letters of Complaints, Claims, Adjustments.</li> <li>3. Letters under Right to Information (RTI) Act</li> <li>4. Consumer Grievance and Redressal Letters.</li> <li>5. Promotional leaflets, fliers and Sales letter.</li> </ol>
3	<b>Presentation Skills</b>
	Selection of topics, structure of presentation, Use of PPT, Body language and non-Verbal cues.
4	<b>Language and Writing Skills</b>
	<p><b>A. Reports:</b> Parts, Types, Feasibility Reports, Investigative Reports, Project Report, Business Proposal.</p> <p><b>B. Summarisation:</b> Identification of main and supporting/sub points. Presenting these points in a cohesive manner.</p>

## **References:**

1. Raman Meenakshi and Singh Prakash. *Business Communication*. Oxford University Press , 2007. 24x19 - 275 PB 0-19-567695-5, Meenakshi X45.
2. Deshmukh Sandeep. *Group Communication: Theory and Methods*. Ane Books India, 2008. 22x15 - 495 HB 81-8052-146-X, Sandeep X45
3. Riel Cees B.M. *Essentials of Corporate Communication: Implementing Practices for Effective Reputation Management*. 23x15 - 495 PB 0-415-32826-8, Riel, Cees B.M. X45
4. Bhatia R.C. *Business Communication*. Ane Books India, 2008. 24x18 - 250 PB 81-8052-016-1, Bhatia, R. C. X45.
5. Ober Scat. *Contemporary Business Communication (with CD)*. Bizatantra , 2005. 26x20 - 349 PB 81-7722-522-7. Scat X45.
6. Kumar Raj. *Basic Business Communication ( With CD # C01130 ) : Concepts, Applications and Skills*. Excel Books, 2010. 295 PB 978-81-7446-866-6, Kumar Raj X45.
7. Lesikar, Raymond.V., Pettit John D and Flatley Marie . *Basic Business Communication*. Richard D. Irwin, INC. 1993. 26x20c.m. HB 0 256 10936 2, Lesikar, R.V. X:8(22).
8. Naterop, B. Jean and Revell, Rod. *Telephoning in English*. Cambridge University. 2007. 24x18 + C00942 - C00943 - 375 PB 0-521-70893-1, B. Jean X45.

## **Suggested List of MOOC**

1. <https://www.mooc-list.com/tags/communication-skills>
2. <https://www.mooc-list.com/.../effective-communication>
3. <https://www.mooc-list.com/tags/business-communication>
4. <https://www.skilledup.com/.../learn-communications-online-free>
5. <http://www.about.com/Communication+Skills+List>

## **Courses:**

1. <https://www.coursera.org/learn/management-leadership-english#>
2. <https://www.coursera.org/learn/business#>
3. <https://www.coursera.org/learn/powerpoint-presentations>

**Business Communication**  
**Paper II**  
*Question Paper Pattern*  
*(Academic Year: 2022-2023)*

**Tutorial Activity:** 40 Marks

**Semester II**

Particulars	Marks
Group Discussion	10
Prepare a Flyer	10
Role Play	5
Report writing	15

**Semester End Examination (SEE):** 60 Marks

Maximum Marks

60

Duration

: 2 Hours

Note: (1) All questions are compulsory.

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
Q-1 (Module-I & II)	Short Notes – Any 3 out of 5	15
Q-2 (Module -I & II)	Essay type question – Any 2 out of 4	20/15
Q-3 (Module -III)	Letter of inquiry Letters of Complaints, Claims, Adjustments Letters under Right to Information (RTI) Act Consumer Grievance and Redressal Letters	10/15
Q-4 (Module -IV)	Report Writing/ Business Proposal & Summarization	15
	<b>Total</b>	<b>60</b>

# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Ability Enhancement Compulsory Courses (AECC)*

Course Code 30205

Environmental Studies-II

Semester II

## **Instructional Objectives:**

- To educate the learner of various methods of Solid Waste Management for Sustainable Society and to create awareness about Agriculture and Industrial Development and its impact on the environment.
- To sensitize learners towards various Environmental Movements and educate them towards Environmental laws.
- To sensitize learners on the typology of tourism.
- To strengthen the learners map reading and interpretation skills with respect to Mumbai and Konkan region.

## **Learning Outcomes:**

- It will enhance the learners overall understanding of Environmental aspects.
- The learners will be able to understand the functional and spatial links between environment, economy and society.
- The course will sensitise the learners towards various environmental issues at various levels and environmental movements towards making the environment sustainable.
- The learner appreciates the importance of conservation of places of tourist attraction.

## Modules at a Glance

Environmental Studies-II		
Sr. No.	Modules	No. of Lectures
1	Solid Waste Management for Sustainable Society	13
2	Agriculture and Industrial Development	13
3	Tourism and Environment	13
4	Environmental Movements and Management	13
5	Map Filling	08
Total No. of Lectures:		60

<b>Sr. No.</b>	<b>Modules</b>
<b>1.</b>	<b>Solid Waste Management for Sustainable Society</b>
	Classification of solid wastes–Types and Sources of Solid Waste; Effects of Solid Waste Pollution-Health hazards, Environmental Impacts; Solid Waste Management–solid waste management in Mumbai- Schemes and initiatives run by MCGM- Role of citizens in Waste Management in Urban and Rural areas.
<b>2.</b>	<b>Agriculture and Industrial Development</b>
	Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, desertification- Uneven Food Production– Hunger, Malnutrition and Food Security–Sustainable Agricultural practices, GMO/Crops, Environmental Problems Associated with Industries- pollution- Global warming, Ozone Layer Depletion, Acid rain, Sustainable Industrial practices– Green Business and Green Consumerism, Corporate Social Responsibility towards the environment.
<b>3.</b>	<b>Tourism and Environment</b>
	Tourism: Meaning, Nature, Scope and importance– Typology of tourism with special reference to Ecotourism; Tourism potentials in India and challenges before India; Consequences of tourism: Positive and Negative Impacts on Economy, Culture and environment- Ecotourism.
<b>4.</b>	<b>Environmental Movements and Management</b>
	Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghats movement and other contemporary environmental movements; Environmental Management: Concept, need and relevance; Concept of ISO 14000; Concept of Carbon Bank and Carbon Credit, EIA, ecological footprint; Environment Protection Acts; Concept and components of Geospatial Technology- Applications of GST in Environmental Management.
<b>5.</b>	<b>Map Filling (Practical Component)</b>
	Map filling of Konkan (4 Lectures) and Mumbai (4 Lectures) (Environmentally significant features)

## **References:**

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India, Email:mapin@icenet.net.
3. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
4. Clark R.S., Marine Pollution, Clarendon Press Oxford.
5. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopaedia, Jaico Publ. House, Mumbai, 1196p.
6. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
7. Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p.
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9. Heywood, V.H &Waston, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
10. Jadhav, H &Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
11. Mckinney, M.L. & School, R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.
12. Mhaskar A.K., Matter Hazardous, Techno-Science Publication.
13. Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co.
14. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
15. Rao M N. & Datta, A.K. 1987. WasteWater treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
16. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut.
17. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science XI
18. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R).
19. Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication.
20. Ecotourism Economics and Environment” by Nagarajan K and Alex K Thottunkel.
21. Indian Ecotourism: Environmental Rules and Regulations” by Ratandeeep Singh.
22. Ecotourism and Sustainable Development” by Ravishanker Singh.
23. K. Agarwal et al (1996) Biodiversity and Environment, APH, DehraDun.
24. S.S. Negi (1993) Biodiversity and its Conservation in India, Indus Publications, New Delhi.
25. W.W. Collins and C.O. Qualset (1998) Biodiversity in Agro-ecosystem, CRC, Boston.
26. V.K. Krishnamurthy (2003) TextBook of Biodiversity, Science Publisher, Chennai.
27. Bharucha Erach, Textbook of Environmental Studies for Undergraduate Courses, Universities Press, 2005.

**Environmental Studies II**  
**Semester II**  
***Question Paper Pattern***  
***(Academic Year: 2022-2023)***

- I. Class test : 10 marks**  
**II. Map practice work/ Exhibition : 10 marks**  
**III. Project / Field Work : 20 marks**

Project/Field Work shall include:

- a. Composting
- b. E-waste management
- c. Tetra pack management
- d. Field tours/ Nature trails
- e. Beach clean up
- f. Group assignments/projects
- g. Case studies
- h. Article review
- i. Book review
- j. visit to a solid waste/ medical waste/ e-waste recycling unit
- k. Industrial visit
- l. Visit to an NGO
- m. Debate club
- n. Documentary review
- o. Plastic waste management
- p. Case studies related to other projects mentioned above ( National/International level)
- q. Swachh Bharat Abhiyaan (in different areas)
- r. Develop a game for waste management/green campus/environmental conservation
- s. Best out of Waste Project
- t. Environmental / Green Audit.

**Total: 40 marks**

**Semester End Examination (SEE)- 60 Marks**

Maximum Marks 60

Duration : 2 Hours

Note: (1) All questions are compulsory, subject to internal choice.

(4) Draw diagrams wherever necessary.

(5) Figures to the right indicate full marks.

<b>Question No.</b>	<b>Particulars (Nature of Questions)</b>	<b>Marks (To Be Attempted)</b>
Q-1	A) Map filling- Mumbai Map (05 Marks) B) Map filling- Konkan Map (05 Marks)	10
Q-2 (Module-I)	Attempt Any 2 A) B) C)	10
Q-3 (Module-II)	Attempt Any 2 A) B) C)	10
Q-4 (Module-III)	Attempt Any 2 A) B) C)	10
Q-5 (Module IV)	Attempt Any 2 A) B) C)	10
Q-6	Write a short notes (Any Two) a. From Unit-I b. From Unit-II c. From Unit-III d. From Unit-IV	10
	<b>Total</b>	<b>60</b>



# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

*Skill Enhancement Course (SEC)*

Course Code 30206

**Foundation Course II**  
(Structure of Finance and Regulation) (2 Credits)

## **Instructional Objectives:**

- To make the learners aware about the various aspects of globalization.
- To make the learners aware about “The Great Recession.”
- To familiarize the learners with the concepts related to Global Financial Markets.
- To enable the learner to appreciate the role of governments in handling global crises.

## **Learning Outcomes:**

- The learner understands the role of LPG and its impact.
- The learners appreciate the role played by the government to counter the global financial crisis
- The learner appreciates the role of the financial markets in ensuring the stable economy of the country
- The learner gains knowledge about policy formulation and its relevance.

## **Semester II**

### **Modules at a Glance**

<b>Foundation Course – II</b> <b>Structure of Finance and Regulation</b>		
<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Globalisation and India	11
2	Global Financial Markets	11
3	International Supervisors	11
4	Major Economic global crisis	12
<b>Total No. of Lectures:</b>		<b>45</b>

Sr.No.	Modules / Units
<b>Unit I</b>	<b>Globalisation and India</b>
	<ul style="list-style-type: none"> <li>● Understanding the concepts of liberalization, privatization and globalization;</li> <li>● International Trade and its impact on business</li> <li>● Impact of globalization on industry: benefits from globalisation of business</li> <li>● Free trade vs protection; WTO- impact on international trade.</li> </ul>
<b>Unit II</b>	<b>Global Financial Markets</b>
	<ul style="list-style-type: none"> <li>● Global financial systems.</li> <li>● Development of financial systems and the factors affecting the stability of financial systems.</li> <li>● The different participants in the financial markets.</li> <li>● Role of the financial markets in helping achieve a nation's objectives.</li> </ul>
<b>Unit III</b>	<b>International Supervisors</b>
	<ul style="list-style-type: none"> <li>● Bank for International Settlements.</li> <li>● IAIS principles (Insurance Core Principles).</li> <li>● IOSCO principles.</li> <li>● Role of multilateral organisations for supervision of financial markets e.g. World Bank, IMF, UN.</li> </ul>
<b>Unit IV</b>	<b>Major Economic global crisis</b>
	<ul style="list-style-type: none"> <li>● The world economy since the Great Depression.</li> <li>● History of banking crises and irrational behaviour- banking crisis of 2008.</li> <li>● Policy adopted by governments to tackle the 2008 financial crisis.</li> <li>● The stimulus–austerity debate and regulatory action after the 2008 crisis</li> </ul>

### **References:**

1. Mehta, P.L.: Managerial Economics – Analysis, Problem and Cases (S. Chand & Sons, N. Delhi).
2. Hirschey.M., Managerial Economics, Thomson South Western
3. Salvatore, D.: Managerial Economics in a global economy (Thomson South Western Singapore).
4. Frank R.H, Bernanke.B.S., Principles of Economics (Tata McGraw Hill).
5. Gregory Mankiw., Principles of Economics, Thomson South Western.
6. Samuelson & Nordhas.: Economics (Tata McGraw Hills, New Delhi).
7. Pal Sumitra, Managerial Economics cases and concepts (Macmillan, New Delhi).



# Syllabus of courses of F.Y.B.Com (Actuarial Studies)

With effect from the Academic Year 2022-2023

## Core Courses (CC)

Course Code 30207

### Financial Mathematics-II Statistics

#### Instructional Objectives:

- To expose the user to fundamental concepts such as cash flows, present value, future value, yield and probability that form the basis for further advanced learning.
- To understand how to construct the best investment strategies that minimise risks in the real world.
- To express, reason, and prove the underlying principles of finance and Research.
- To tackle the problems of the valuation of assets and financial instruments, as well as optimizing capital allocation and resources.

#### Learning outcome:

- The learner is able to understand basic elements of probability theory and apply them to solve real life problems.
- The learner is able to solve problems based on the industrial decision making process.
- The learner is able to frame a hypothesis and test it using binomial and normal distributions.
- Understand the different decision-making techniques with certainty and under risk and to compare and conclude the optimal decision.

## Semester II

### Modules at a Glance

Financial Mathematics-II Statistics		
Sr. No.	Modules	No. of Lectures
1	Random variables	15
2	Statistical distributions	15
3	Elementary Probability Theory	15
4	Decision Theory	15
Total No. of Lectures:		60

Sr. No	Modules
1	<b>Random variables</b>
	<ol style="list-style-type: none"> <li>1. Concept of random variable</li> <li>2. Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions, cdf and pdf.</li> <li>3. Standard Deviation and coefficient of variation.</li> <li>4. Discrete Random variables and distribution: Explanation and application of binomial, Negative binomial, geometric, hypergeometric, poisson, uniform and exponential variables.</li> </ol>
2	<b>Statistical distributions</b>
	<ol style="list-style-type: none"> <li>1. Continuous Random variables and distribution: Explanation and application of Gamma, normal and chi – squared.</li> <li>2. Probability and Moment generating functions, pseudo random variables</li> <li>3. Confidence intervals for unknown parameters of binomial and normal distributions, CLT. Testing of Hypothesis, Null hypothesis, Alternative hypothesis, level of significance, basic tests for one-sample and two- sample situations involving binomial and normal distributions, predicted values, and prediction interval.</li> </ol>
3	<b>Elementary Probability Theory</b>
	<p>Prerequisites: (Factorial Notation, Fundamental principle of counting, Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between <math>{}^n C_r</math> and <math>{}^n P_r</math> Examples on commercial application of permutation and combination).</p> <ol style="list-style-type: none"> <li>1. Probability Theory: Concept of random experiment/trial and possible outcomes; Sample Space and Discrete Sample Space; Events their types, Algebra of Events, Mutually Exclusive and Exhaustive Events, Complementary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: <math>P(A \cap B) = P(A) P(B)</math>, Venn Diagrams, probability axioms. Simple examples.</li> <li>2. Moments: Introduction, Methods of calculations: expected value, mode, median, percentile and higher moments.</li> <li>3. Bayes Theorem and conditional probability.</li> </ol>
4	<b>Decision Theory</b>

	<p>Decision making situation, Decision maker, Courses of Action, States of Nature, Pay-off and Pay-off matrix; Decision making under uncertainty, Maximin, Maximax, Minimax regret and Laplace criteria; simple examples to find optimum decision. Formulation of Payoff Matrix. Decision making under Risk, Expected Monetary Value (EMV); Decision Tree; Simple Examples based on EMV. Expected Opportunity Loss (EOL), simple examples based on EOL.</p>
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**Reference :**

1. Mathematics for Economics and Finance Methods and Modelling by Martin Anthony and Norman Biggs, Cambridge University Press, Cambridge low-priced edition, 2000, Chapters 1, 2, 4, 6 to 9 & 10.
2. Applied Calculus: By Stephen Waner and Steven Constenoble, Brooks/Cole Thomson Learning, second edition, Chapter 1 to 5.
3. Business Mathematics By D. C. Sancheti and V. K. Kapoor, Sultan Chand & Sons, 2006, Chapter 1, 5, 7, 9 & 10.
4. Mathematics for Business Economics: By J. D. Gupta, P. K. Gupta and Man Mohan, Tata Mc-Graw Hill Publishing Co. Ltd., 1987, Chapters 9 to 11 & 16.
5. Quantitative Methods-Part-I By S. Saha and S. Mukerji, New Central Book Agency, 1996, Chapters 7 & 12.
6. Mathematical Basis of Life Insurance By S.P. Dixit, C.S. Modi and R.V. Joshi, Insurance Institute of India, Chapters 1 and 2.
7. Securities Laws & Regulation of Financial Market : Intermediate Course Paper 8, Institute of Company Secretaries of India, Chapter 11.
8. Investments By J.C. Francis & R.W. Taylor, Schaum's Outlines, Tata Mc-Graw Hill Edition 2000, Chapters 2,4 & section 25.1.
9. Indian Mutual Funds Handbook : By SundarShankaran, Vision Books, 2006, Sections 1.7,1.8.1, 6.5 & Annexures 1.1to 1.3.
10. STATISTICS by Schaum Series.
11. Operations Research by Gupta and Kapoor.
12. Operations Research by Schaum Series.
13. Fundamentals of Statistics - D. N. Elhance.
14. Statistical Methods - S.G. Gupta (S. Chand & Co).
15. Statistics for Management - Lovin R. Rubin D.S. (Prentice Hall of India).
16. Statistics - Theory, Method & Applications D.S.Sancheti & V. K. Kapoor.

17. Modern Business Statistics - (Revised)-B. Pearles& C. Sullivan –Prentice Hall of India.
18. Business Mathematics &Statistics : B Aggarwal, Ane Book Pvt. Limited.
19. Business Mathematics : D C Sancheti& V K Kapoor, Sultan Chand & Sons.
20. Business Mathematics: A P Verma, Asian Books Pvt.: Limited.
21. Statistics of Management , Richard Levin &David S. Rubin,Printice Hall of India  
, New Delhi.
22. Statistics for Business & Economics, David R Anderson, Dennis J  
Sweney, Thopmson Publication.
23. Business Statistics, Bharadwaj, Excel Books, Delhi.
24. Business Mathematics, S.K Singh & J.K Singh, Brijwasi Book Distributor &Publisher.
25. Mathematics for Economics and Finance, Martin Anthony, Norman Biggs,  
Cambridge lowprice editions, 2000.
26. Business Mathematics, J.K. Singh, 2009, Himalaya Publishing House.  
Mathematics of Finance 2nd Edition Schaum’s Outline Series Peter Zima,  
Robert Browns Tata McGraw-Hill Publishing Company Ltd.

## Financial Mathematics- II

### Semester II

### *Question Paper Pattern* (Academic Year: 2022-2023)

#### Cumulative Continuous Assessment (CCA)

- I. Tutorial Test I : 15 marks  
II. Tutorial Test II : 15 marks  
III. Viva Based on Tutorials : 05 marks  
IV. Class Participation & Attendance : 05 marks  
**Total: 40 marks**

#### Semester End Examination (SEE) 60 Marks

Maximum Marks : 60  
Duration : 2 Hours

Note: (1) All questions are compulsory.  
(2) Attempt **any three out of four sub questions** from each question.

Question No.	Particulars (Nature of Questions)	Marks (To Be Attempted)
Q-1 (Module-I)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-2 (Module-II)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-3 (Module-III)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
Q-4 (Module-IV)	A) Numerical B) Numerical C) Numerical D) Higher Order Thinking Skills	15
	<b>Total</b>	<b>60</b>