

**Cover Page**

AC 11-05-2017  
Item No. 4.171

**UNIVERSITY OF MUMBAI**



**Syllabus for Approval**

<b>Sr. No.</b>	<b>Heading</b>	<b>Particulars</b>
1	Title of the Course	B.Com. (Actuarial Studies)
2	Eligibility for Admission	H.S.C. with Mathematics as one of the subject
3	Passing Marks	As per norms of University of Mumbai for undergraduate programme
4	Ordinances / Regulations ( if any)	As per norms
5	No. of Years / Semesters	3 years (6 semesters)
6	Level	<del>P.G. / U.G./ Diploma / Certificate</del> ( Strike out which is not applicable)
7	Pattern	<del>Yearly / Semester</del> ( Strike out which is not applicable)
8	Status	<del>New / Revised</del> ( Strike out which is not applicable)
9	To be implemented from Academic Year	From Academic Year 2017-2018

Date:

Signature :

Name of BOS Chairperson / Dean : Dr. S.T.Gadade

# University of Mumbai



## **B.Com. (Actuarial Studies) Programme Three Year Integrated Programme- Six Semesters *Course Structure***

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

**To be implemented from Academic Year- 2017-2018 Progressively**

***Board of Studies-in-Commerce***

***Elective Courses (EC)***  
***Discipline Specific Elective(DSE) Courses***

**1.Accountancy and Financial Management I**

***Modules at a Glance***

Sr. No.	Modules	No. of Lectures
1	Accounting standards issued by ICAI and Inventory valuation	15
2	Final Accounts	15
3	Departmental Accounts	15
4	Accounting for Hire Purchase	15
<b>Total</b>		<b>60</b>

Sr. No.	Modules / Units
1	<b>Accounting standards issued by ICAI and Inventory valuation</b>
	<ul style="list-style-type: none"> <li>• <b>Accounting standards:</b> Concepts, benefits, procedures for issue of accounting standards Various AS : <b>AS – 1: Disclosure of Accounting Policies</b> Purpose, Areas of Policies, Disclosure of Policies, Disclosure of Change in Policies, Illustrations <b>AS–2: Valuation of Inventories (Stock)</b> Meaning, Definition, Applicability, Measurement of Inventory, Disclosure in Final Account, Explanation with Illustrations. <b>AS – 9: Revenue Recognition</b> Meaning and Scope, Transaction excluded, Sale of Goods, Rendering of Services, Effects of Uncertainties, Disclosure, Illustrations.</li> <li>• <b>Inventory Valuation</b> Meaning of inventories Cost for inventory valuation Inventory systems : Periodic Inventory system and Perpetual Inventory System Valuation: Meaning and importance Methods of Stock Valuation as per AS – 2 : FIFO and Weighted Average Method Computation of valuation of inventory as on balance sheet date: If inventory is taken on a date after the balance sheet or before the balance sheet</li> </ul>
2	<b>Final Accounts</b>
	<p>Expenditure: Capital, Revenue Receipts: Capital, Revenue Adjustment and Closing Entries Final accounts of Manufacturing concerns (Proprietary Firm)</p>
3	<b>Departmental Accounts</b>
	<p>Meaning Basis of Allocation of Expenses and Incomes/Receipts Inter Departmental Transfer : at Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit &amp; Loss Account and Balance Sheet</p>
4	<b>Accounting for Hire Purchase</b>
	<p>Meaning Calculation of interest Accounting for hire purchase transactions by asset purchase method based on full cash price Journal entries, ledger accounts and disclosure in balance sheet for hirer and vendor (excluding default, repossession and calculation of cash price)</p>

## INSURANCE BUSINESS PAPER I (PRINCIPLES OF INSURANCE)

### UNIT 1

The Conceptual Framework – What Is Insurance-Meaning and Definition – Brief History of Insurance – Understanding Perils and Risks – Classification of Risks and Hazards — Role of Insurance in Social and Economic Development – Classes of Insurance – Growth and Evolution of insurance Industry in India-Unique Characteristics of Insurance Business – Managing Risk – Introduction into insurance funds– Trustees in insurance business- Reinsurance –Linking Insurance with Social Security

### UNIT 2

The Insurance Contract – Utmost Good Faith or Uberrima Fides – Insurable Interest – Insurer's Insurable Interest – Criminal Acts – Indemnity – Subrogation and Contribution – Proximate Cause – Personal and Non-Personal Contracts—Distinguishing insurance contracts with other contracts. 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

### UNIT 3

Insurance Products – Life Insurance Products including Government Schemes-Introduction to Non-Life Insurance , Fire ,Loss of Profits , Marine ,Marine Cargo ,Motor and Miscellaneous – Personal Accident ,Health , Hit and Run Cases ,Aviation Etc. –Insurance Policy and documents-Certificates of Insurance – Open Policy – Floater – Franchise – Coinsurance .Compensation under insurance-Total Loss – Actual or Constructive Loss – Bonus – Replacement – Policy value – Agreed Value – Full Value – First Loss – Increased Value .

### UNIT 4

The Insurance Market – Life and Non-Life Insurers – Reinsurers – Individual and Corporate Agents – Brokers – Surveyors – Medical Examiners – Third Party Administrators – IRDA – Insurance Councils – Ombudsmen – Educational Institutes – Councils – Tariff Advisory Committee-Career Opportunities in Insurance Business. Ethical aspects of insurance business.

## **Financial Mathematics**

**Syllabus for Actuarial Science for B.Com Applied Course.**

# **First Semester**

## **Unit I**

### **Functions and their applications**

Introduction-Function-Types of functions-One-one functions, onto functions, algebraic functions, logarithmic functions and exponential functions, Graph of functions; Problems on functions.

Functions related to Business and Economics (Demand Function, Supply function, Cost function, Revenue function and Profit function. Problems based on these functions.

## **Unit 2**

### **Sequences and Series**

Sum of the series

Arithmetic Progression(AP) , Geometric Progression (GP)

Sum of AP, Sum of GP.

## **Unit 3**

### **Permutations and Combinations**

Introduction, Meaning of factorial notation,

Fundamental principle, Permutations, Problems on permutations..

Combinations, Problems on combinatons.

## **Unit 4**

### **Interest**

Simple interest, Problems on simple interest.

Compound Interest, Problems on Compound interest.

Present Value, Nominal and Effective rate of interest

## ***Ability Enhancement Courses (AEC)***

### **4. Business Communication I**

#### ***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Theory of Communication	10
2	Obstacles to Communication in Business World	10
3	Business Correspondence	12
4	Language and Writing Skills	13
<b>Total</b>		<b>45</b>

**Note:**

*One tutorial per batch per week in addition to number of lectures stated above  
(Batch size as per the University norms)*

Sr. No.	Modules / Units
1	<b>Theory of Communication</b>
	<p><b>Concept of Communication:</b> Meaning, Definition, Process, Need, Feedback Emergence of Communication as a key concept in the Corporate and Global world Impact of technological advancements on Communication</p> <p><b>Channels and Objectives of Communication:</b> <b>Channels-</b> Formal and Informal- Vertical, Horizontal, Diagonal, Grapevine</p> <p><b>Objectives of Communication:</b> Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees (A brief introduction to these objectives to be given)</p> <p><b>Methods and Modes of Communication:</b> Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegram to be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing</p>
2	<b>Obstacles to Communication in Business World</b>
	<p><b>Problems in Communication /Barriers to Communication:</b> Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers</p> <p><b>Listening:</b> Importance of Listening Skills, Cultivating good Listening Skills – 4</p> <p><b>Introduction to Business Ethics:</b> Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices: Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste, Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour</p>
3	<b>Business Correspondence</b>
	<p><b>Theory of Business Letter Writing:</b> Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing,</p> <p><b>Personnel 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 Recommendation (to be taught but not to be tested in the examination)]</p>
Sr. No.	Modules / Units
4	<b>Language and Writing Skills</b>
	<p><b>Commercial Terms used in Business Communication</b></p> <p><b>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, a short informal report etc.]</p>



	<p><b>Activities</b></p> <ul style="list-style-type: none"><li>▪ Listening Comprehension</li><li>▪ Remedial Teaching</li><li>▪ Speaking Skills: Presenting a News Item, Dialogue and Speeches</li><li>▪ Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, Rules of spelling.</li><li>▪ Reading Comprehension: Analysis of texts from the fields of Commerce and Management</li></ul>
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***Skill Enhancement Courses (SEC)***

**5. Foundation Course - I**

### ***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Overview of Indian Society	05
2	Concept of Disparity- 1	10
3	Concept of Disparity-2	10
4	The Indian Constitution	10
5	Significant Aspects of Political Processes	10
	<b>Total</b>	<b>45</b>

Sr. No.	Modules / Units
<b>1</b>	<b>Overview of Indian Society</b>
	Understand the multi-cultural diversity of Indian society through its demographic composition: population distribution according to religion, caste, and gender; Appreciate the concept of linguistic diversity in relation to the Indian situation; Understand regional variations according to rural, urban and tribal characteristics; Understanding the concept of diversity as difference
<b>2</b>	<b>Concept of Disparity- 1</b>
	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 in media; Appreciate the inequalities faced by people with disabilities and understand the issues of people with physical and mental disabilities
<b>3</b>	<b>Concept of Disparity-2</b>
	Examine inequalities manifested due to the caste system and inter-group conflicts arising thereof; Understand inter-group conflicts arising out of communalism; Examine the causes and effects of conflicts arising out of regionalism and linguistic differences
<b>4</b>	<b>The Indian Constitution</b>
	Philosophy of the Constitution as set out in the Preamble; The structure of the Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the Indian Citizen; tolerance, peace and communal harmony as crucial values in strengthening the social fabric of Indian society; Basic features of the Constitution
<b>5</b>	<b>Significant Aspects of Political Processes</b>
	The party system in Indian politics; Local self-government in urban and rural areas; the 73rd and 74th Amendments and their implications for inclusive politics; Role and significance of women in politics

**Topics for Project Guidance: Growing Social Problems in India:**

- Substance abuse- impact on youth & challenges for the future
- HIV/AIDS- awareness, prevention, treatment and services
- Problems of the elderly- causes, implications and response
- Issue of child labour- magnitude, causes, effects and response
- Child abuse- effects and ways to prevent
- Trafficking of women- causes, effects and response

**Note:**

**Out of the 45 lectures allotted for 5 units for Semester I, about 15 lectures may be allotted for project guidance**

***Skill Enhancement Courses (SEC)***

**5.Foundation Course in NSS - I**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Introduction to NSS	10
2	Concept of Society and Social Issues in India	15
3	Indian Constitution and Social Justice	10
4	Human Personality and National Integration	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Introduction to NSS</b>
	<p><b>Introduction to National Service Scheme(NSS)</b>  Orientation and structure of National Service Scheme(NSS)  National Service Scheme(NSS)- its objectives  The historical perspective of National Service Scheme(NSS)  National Service Scheme(NSS)- Symbol and its meaning  National Service Scheme(NSS)- its hierarchy from national to college level</p> <p><b>National Service Scheme(NSS) Regular activities</b>  Distribution of working hours- Association between issues and programs-  community project- urban rural activities, Association- modes of activity  evaluation</p>
2	<b>Concept of Society and Social Issues in India</b>
	<p><b>History and philosophy of social sciences in India</b>  Concept of society- Development of Indian society - Features of Indian Society-  Division of labour and cast system in India</p> <p><b>Basic social issues in India</b>  Degeneration of value system, Family system, Gender issues, Regional imbalance</p>
3	<b>Indian Constitution and Social Justice</b>
	<p><b>Indian Constitution</b>  Features of Indian Constitution - Provisions related to social integrity and  development</p> <p><b>Social Justice</b>  Social Justice- the concept and its features  Inclusive growth- the concept and its features</p>
4	<b>Human Personality and National Integration</b>
	<p><b>Dimensions of human personality</b>  Social Dimension of Human personality- Understanding of the society  Physical Dimension of Human personality- Physical Exercise, Yoga, etc.</p> <p><b>National integration &amp; Communal Harmony</b>  National Integration- its meaning, importance and practice  Communal Harmony- its meaning, importance and practice</p>

***Skill Enhancement Courses (SEC)***

**5.Foundation Course in NCC - I**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Introduction to NCC, National Integration & Awareness	10
2	Drill: Foot Drill	10
3	Adventure Training, Environment Awareness and Conservation	10
4	Personality Development and Leadership	10
5	Specialized Subject: Army/ Navy/ Air	05
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Introduction to NCC, National Integration &amp; Awareness</b>
	<p><b>Desired outcome:</b> The students will display sense of patriotism, secular values and shall be transformed into motivated youth who will contribute towards nation building through national unity and social cohesion.</p> <ul style="list-style-type: none"> <li>• Genesis, Aims, Objectives of NCC &amp; NCC Song</li> <li>• Organisation &amp; Training</li> <li>• Incentives &amp; Benefits</li> <li>• Religions, Culture, Traditions and Customs of India</li> <li>• National Integration: Importance and Necessity</li> <li>• Freedom Struggle</li> </ul>
2	<b>Drill: Foot Drill</b>
	<p><b>Desired outcome:</b> The students will demonstrate the sense of discipline, improve bearing, smartness, turnout, develop the quality of immediate and implicit obedience of orders, with good reflexes.</p> <ul style="list-style-type: none"> <li>• General and Words of Command</li> <li>• Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt</li> <li>• Sizing, Forming Up in Three Ranks and Numbering, Open and Close Order March and Dressing</li> <li>• Saluting at the Halt, Getting On Parade, Dismissing and Falling Out</li> <li>• Marching, Length of Pace and Time of Marching in Quick Time and Halt, Slow March and Halt</li> <li>• Turning on the March and Wheeling.</li> <li>• Saluting on the March.</li> <li>• Formation of squad and Squad Drill.</li> </ul>
3	<b>Adventure Training, Environment Awareness and Conservation</b>
	<p><b>Adventure Training</b>  <b>Desired outcome:</b> The students will overcome fear &amp; inculcate within them the sense of adventure, sportsmanship, esprit-d-corp and develop confidence, courage, determination, diligence and quest for excellence.</p> <ul style="list-style-type: none"> <li>• Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc</li> </ul> <p><b>Environment Awareness and Conservation</b>  <b>Desired outcome:</b> The student will be aware of the conservation of natural resources and protection of environment.</p> <ul style="list-style-type: none"> <li>• Natural Resources – Conservation and Management</li> <li>• Water Conservation and Rainwater Harvesting</li> </ul>

Sr. No.	Modules / Units
4	<b>Personality Development and Leadership</b>
	<p><b>Desired outcome:</b> The student will develop an all-round personality with adequate leadership traits to deal / contribute effectively in life.</p> <ul style="list-style-type: none"> <li>• Introduction to Personality Development</li> <li>• Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological</li> <li>• Self Awareness Know yourself/ Insight</li> <li>• Change Your Mind Set</li> <li>• Communication Skills: Group Discussion / Lecturettes (Public Speaking)</li> <li>• Leadership Traits</li> <li>• Types of Leadership</li> </ul>
5	<b>Specialized Subject: Army Or Navy Or Air</b>
	<p><b>Army</b></p> <p><b>Desired outcome:</b> The training shall instill patriotism, commitment and passion to serve the nation motivating the youth to join the defence forces. It will also acquaint, expose &amp; provide basic knowledge about armed, naval and air-force subjects</p> <p><b>A. Armed Force</b></p> <ul style="list-style-type: none"> <li>• Basic organisation of Armed Forces</li> <li>• Organisation of Army</li> <li>• Badges and Ranks</li> </ul> <p><b>B. Introduction to Infantry and weapons and equipments</b></p> <ul style="list-style-type: none"> <li>• Characteristics of 7.62mm SLR Rifle, Ammunition, Fire power, Stripping, Assembling and Cleaning</li> </ul> <p><b>C. Military history</b></p> <ul style="list-style-type: none"> <li>• Biographies of renowned Generals (Carriapa / Sam Manekshaw)</li> <li>• Indian Army War Heroes- PVCs</li> </ul> <p><b>D. Communication</b></p> <ul style="list-style-type: none"> <li>• Types of Communications</li> <li>• Characteristics of Wireless Technologies (Mobile, Wi-Fi etc.)</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p><b>Navy</b></p> <p><b>A. Naval orientation and service subjects</b></p> <ul style="list-style-type: none"> <li>• History of the Indian Navy-Pre and Post Independence, Gallantry award winners</li> <li>• Organization of Navy- NHQ, Commands, Fleets, Ships and shore establishments</li> <li>• Types of Warships and their role</li> <li>• Organization of Army and Air Force- Operational and Training commands</li> <li>• Ranks of Officers and Sailors, Equivalent Ranks in the Three Services</li> </ul> <p><b>B. Ship and Boat Modelling</b></p> <ul style="list-style-type: none"> <li>• Principles of Ship Modelling</li> <li>• Maintenance and Care of tools</li> </ul>
Sr. No.	Modules / Units
	<p><b>C. Search and Rescue</b></p> <ul style="list-style-type: none"> <li>• SAR Organization in the Indian ocean</li> </ul>



**D. Swimming**

Floating for three minutes and Free style swimming for 50 meters

*OR*

**AIR**

**A. General Service Knowledge**

- Development of Aviation
- History of IAF

**B. Principles of Flight**

- Introduction
- Laws of Motion
- Glossary of Terms.

**C. Airmanship**

- Introduction
- Airfield Layout
- Rules of the Air
- Circuit Procedure
- ATC/RT Procedures
- Aviation Medicine

**D. Aero- Engines**

- Introduction to Aero-engines

***Skill Enhancement Courses (SEC)***

**5.Foundation Course in Physical Education-I**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Introduction to Basic Relevant concepts in Physical Education	10
2	Components of Physical Fitness	15
3	Testing Physical Fitness	10
4	Effect of Exercise on various Body System	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
<b>1</b>	<b>Introduction to Basic Relevant concepts in Physical Education</b>
	<ul style="list-style-type: none"> <li>• Dimensions and determinants of Health, Fitness &amp; Wellness</li> <li>• Concept of Physical Education and its importance</li> <li>• Concept of Physical Fitness and its types</li> <li>• Concept of Physical Activity, exercise and its types &amp; benefits</li> </ul>
<b>2</b>	<b>Components of Physical Fitness</b>
	<ul style="list-style-type: none"> <li>• Concept of components of Physical Fitness</li> <li>• Concept and components of HRPF</li> <li>• Concept and components of SRPF</li> <li>• Importance of Physical Education in developing physical fitness components.</li> </ul>
<b>3</b>	<b>Testing Physical Fitness</b>
	<ul style="list-style-type: none"> <li>• Tests for measuring Cardiovascular Endurance</li> <li>• Tests for measuring Muscular Strength &amp; Endurance</li> <li>• Tests for measuring Flexibility</li> <li>• Tests for measuring Body Composition</li> </ul>
<b>4</b>	<b>Effect of Exercise on various Body System</b>
	<ul style="list-style-type: none"> <li>• Effect of exercises on Musculoskeletal system</li> <li>• Effect of exercises on Circulatory System</li> <li>• Effect of exercises on Respiratory System</li> <li>• Effect of exercises on Glandular System</li> </ul>

***Ability Enhancement Courses (AEC)***

**6.Environmental Studies I**

***Modules at a Glance***

<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	Urbanisation and Environment	13
5	Reading of Thematic Maps and Map Filling	08
<b>Total</b>		<b>60</b>

Sr. No.	Modules / Units
<b>1</b>	<b>Environment and Ecosystem</b>
	Environment: Meaning, definition, scope and its components; 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.
<b>2</b>	<b>Natural Resources and Sustainable Development</b>
	Meaning and definitions ; Classification and types of resources, factors influencing resource; Resource conservation- meaning and methods- I and non-conventional resources, problems associated with and management of water, forest and energy resources- resource utilization and sustainable development
<b>3</b>	<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
<b>4</b>	<b>Urbanisation and Environment</b>
	Concept of Urbanisation– Problems of migration and urban environment-changing landuse, 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
<b>5</b>	<b>Reading of Thematic Maps and Map Filling</b>
	Reading of Thematic Maps(4 Lectures) Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Pictograms - Only reading and interpretation. Map Filling: (4 Lectures) Map filling of World (Environmentally significant features) using point, line and polygon segment. Concept and Calculation of Ecological Footprint

***Elective Courses (EC)-  
Discipline Related Elective (DRE) Courses***

**7. Business Economics I**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Introduction	10
2	Demand Analysis	15
3	Supply and Production Decisions	10

4	Cost of Production	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Introduction</b>
	<p><b>Scope and Importance of Business Economics</b> - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making, The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium</p>
2	<b>Demand Analysis</b>
	<p><b>Demand Function</b> - nature of demand curve under different markets Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts <b>Demand estimation and forecasting:</b> Meaning and significance - methods of demand estimation : survey and statistical methods ( numerical illustrations on trend analysis and simple linear regression)</p>
3	<b>Supply and Production Decisions</b>
	<p><b>Production function:</b> short run analysis with Law of Variable Proportions- Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies and diseconomies of Scale and economies of scope</p>
4	<b>Cost of Production</b>
	<p><b>Cost concepts:</b> Accounting cost and economic cost, implicit and explicit cost, social and private cost, historical cost and replacement cost, sunk cost and incremental cost -fixed and variable cost - total, average and marginal cost - Cost Output Relationship in the Short Run and Long Run (hypothetical numerical problems to be discussed) <b>Extensions of cost analysis:</b> cost reduction through experience - LAC and Learning curve - Break even analysis (with business applications)</p>





Suggested Syllabus for Semester II Accountancy Paper

Module I

IND AS 32 Financial Instruments – Presentation

IND AS 39 Financial Instruments – recognition and measurement

Module II

IND AS 107 Financial Instruments – disclosures in re-classification and fair value measurement and liquidity risk.

IND AS 109 Financial Instruments – classification, assessment of credit losses, hedge accounting and disclosures.

Module II

IND AS 104 Insurance Contracts

Contract classification and unbundling

Recognition and measurement

Nature and extent of risks arising in Insurance Contracts

Disclosure

Module IV

IND AS 19 Employee Benefits

Models used in actuarial valuation of gratuity in India. (Practical questions on valuation can be covered.)

Disclosures under AS 15 and AS 19

Reconciliation of Assets and liability, Assets ceiling

Impact on implementation

Suggested question paper pattern for Accountancy Paper (Semester II)

Q.1 (A) Practical Question from Module I	7 marks
(B) Practical question from Module I	8 marks

Or

Q.1 Full length question from Module I	15 marks
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Q.2 (A) Practical Question from Module II	7 marks
(B) Practical question from Module II	8 marks

Or

Q.2 Full length question from Module II	15 marks
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Q.3 (A) Practical Question from Module III	7 marks
(B) Practical question from Module III	8 marks

Or

Q.3 Full length question from Module III	15 marks
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Q.4 (A) Practical Question from Module IV	7 marks
(B) Practical question from Module IV	8 marks

Or

Q.4 Full length question from Module IV	15 marks
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Q.5 Objective type questions	15 marks
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( Match the following, fill in the blanks, Give one word for MCQs)

Or

Q.5 Short notes (Answer any 3 out of 5)	15 marks
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## INSURANCE BUSINESS (Life and Other Contingencies)

### UNIT I

Life Insurance Organization – Introduction –Approaches to life insurance– The Indian Context – Internal Organization – The Distribution System – Appointment of Agent-Functions of Agent – Agency continuation and termination– Remuneration To Agents – Trends in Life Insurance – Distribution Channels – Premiums and Bonuses – Net and Pure Premium – Premium Calculation-Lapse and Revival – Special Revival Scheme – Instalment Revival Scheme – Loan – Cum – Revival Scheme. Assignment, Nomination

### UNIT II

Introduction to Actuarial Valuation – Bonus – Simple Reversionary Bonus – Compound Reversionary Bonus – Interim Bonus. Plans of Life Insurance – Death Cover – Survival Benefit – Term Assurance – Pure Endowment – Linked – Some Popular Plans- Common Variations – With Profit and Without Profit Policies – Joint Life Policies – Children Plans – Variable Insurance Plans – Postal Life Insurance.

### UNIT III

Annuities – The Nature of Annuity – Immediate Annuity – Deferred Annuity. Group Insurance – Introduction – Meaning of Group Insurance – Types of Group Insurance Schemes – Group Gratuity Schemes – Ways To Meeting Gratuity Liability – Group Superannuation Scheme – Group Leave Encashment Scheme (GLES) – Other Group Schemes – Social Security Schemes. Other Special Need Plans – Industrial Life Insurance – Married Women’s Property (MWP) Act Policies – Plans for differently abled.

### UNIT IV

Introduction to Health Insurance – Range of Products –Awareness about health Contingencies-Importance of Health Insurance in India-Growth and evolution of Health Insurance companies in India– Insurance and Equity Funds – Insurance and Debt Funds – Insurance and Money Market Funds – Liquid Funds – Balanced Funds – Premium Holiday – Annuities and Pensions –Future for Health Insurance

## Financial Mathematics

Syllabus for Actuarial Science for B.Com Applied Course.

### Second Semester

#### Unit 1

##### Matrices

Introduction – Definition of a Matrix, types of Matrices, Equal Matrices, Matrix Addition,

Multiplication of a matrix by a scalar, Matrix Multiplication, Problems on the above concepts.

Transpose of a matrix, Orthogonal; Matrix, Symmetric and Skew-symmetric Matrices, Determinant of a square Matrix, Adjoint of a Matrix, Inverse of a Matrix.

Problems based on the above concepts.

Elementary operations on a matrix, Reduction Method for finding inverse of a matrix, Solution of a system of Linear Equations.

Problems based on the above concepts.

## **Unit 2**

### **Graph of Linear Inequalities**

Introduction, Inequality, solution of an inequality, Graph of an inequality, System of Linear Inequalities,

Mathematical Formulation of Linear Programming Problems. Solution of Linear Programming Problems using graphical method up to two variables.

Application of Linear inequalities in Practical problems.

## **Unit 3**

### **Annuity and Sinking Funds**

Introduction- Concept of annuity, 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.

Amount of a deferred Annuity, sinking fund, Perpetual Annuity, Amortization, Leasing, Capital expenditure and bonds.

## **Unit 4**

### **Shares and Mutual Funds**

Introduction - Concept of share, face value, market value, dividend, equity shares, preferential shares, bonus shares. Problems based on these concepts..

b. Mutual Funds: Simple problems on calculation of Net income after considering entry load, dividend, change in Net Asset Value (N.A.V.) and exit load. Averaging of price under the Systematic Investment Plan (S.I.P.)

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### ***Ability Enhancement Courses (AEC)***

#### **4. Business Communication II**

##### ***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Presentation Skills	10
2	Group Communication	15
3	Business Correspondence	10
4	Language and Writing Skills	10
<b>Total</b>		<b>45</b>

**Note:**

*One tutorial per batch per week in addition to number of lectures stated above  
(Batch size as per the University norms)*

Sr. No.	Modules / Units
<b>1</b>	<b>Presentation Skills</b>
	<b>Presentations:</b> (to be tested in tutorials only) 4 Principles of Effective Presentation Effective use of OHP Effective use of Transparencies How to make a Power-Point Presentation
<b>2</b>	<b>Group Communication</b>
	<b>Interviews:</b> Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit <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 <b>Conference:</b> Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing <b>Public Relations:</b> Meaning, Functions of PR Department, External and Internal Measures of PR
<b>3</b>	<b>Business Correspondence</b>
	<b>Trade Letters:</b> Order, Credit and Status Enquiry, Collection (just a brief introduction to be given) <b>Only following to be taught in detail:-</b> Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, promotional leaflets and fliers Consumer Grievance Letters, Letters under Right to Information (RTI) Act [Teachers must provide the students with theoretical constructs wherever necessary in order to create awareness. However students should not be tested on the theory.]
<b>4</b>	<b>Language and Writing Skills</b>
	<b>Reports:</b> Parts, Types, Feasibility Reports, Investigative Reports <b>Summarisation:</b> Identification of main and supporting/sub points Presenting these in a cohesive manner

**Tutorial Activities:**

*Presentations, Group Discussion, Mock Interviews, Mock Meetings / Conferences, Book Reviews/Summarization, Reading Comprehension: Analysis of texts from the field of Literature*  
[Suggested Books for Book Reviews: Books from the fields of Management, Finance, and Literature Like – Sun Tzu :The Art of War, Eliyahu M. Goldratt : The Goal , Eliyahu M. Goldratt: It's Not Luck , Spencer Johnson: Who Moved My Cheese, Stephen Lundin, Ph.D, Harry Paul, John Christen: Fish, ChetanBhagat One Night At A Call Center, ChetanBhagat My Three Mistakes , ArindamChoudhary: Count Your Chickens Before They Hatch ,Stephen Covey :Seven Habits of Successful People, George Orwell: Animal Farm, Dr. Abdul Kalam: Wings of Fire ]

[N.B.: The above list is only indicative and not prescriptive.]





***Skill Enhancement Courses (SEC)***

**5. Foundation Course - II**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Globalisation and Indian Society	07
2	Human Rights	10
3	Ecology	10
4	Understanding Stress and Conflict	10
5	Managing Stress and Conflict in Contemporary Society	08
<b>Total</b>		<b>45</b>

<b>Sr. No</b>	<b>Modules /Units</b>
1	Globalisation and Indian Society

	Understanding the concepts of liberalization, privatization and globalization;Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.
<b>2</b>	<b>Human Rights</b>
	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights;Human Rights constituents with special reference to Fundamental Rights stated in the Constitution
<b>3</b>	<b>Ecology</b>
	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life;Sustainable development- concept and components; poverty and environment
<b>4</b>	<b>Understanding Stress and Conflict</b>
	Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict
<b>5</b>	<b>Managing Stress and Conflict in Contemporary Society</b>
	Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation;Different methods of responding to conflicts in society; Conflict-resolution and efforts towards building peace and harmony in society

### ***Skill Enhancement Courses (SEC)***

## **5. Foundation Course in NSS - II**

### ***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Socio-economic Survey and Special Camp	10
2	Orientation of the College Unit and Communication Skills	15

3	Rapport with Community and Programme Planning	10
4	Government Organisations /Non-Government Organisations	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Socio-economic Survey and Special Camp</b>
	<p><b>Socio economic survey</b> Socio-economic survey- its meaning and need, Process of Socio-economic survey- design of questionnaire; data collection, data analysis and report writing</p> <p><b>Special camping activity</b> Concept of camp- Identification of community problems- Importance of group living- Team building- Adoption of village- Planning for camp- pre camping, during the course of camp and post camping activities</p>
2	<b>Orientation of the College Unit and Communication Skills</b>
	<p><b>Training and orientation of the program unit in the college</b> Leadership training – formation of need based programmes- Concept of campus to community(C to C) activities</p> <p><b>Communication skills and Documentation</b> Communication skills- the concept, Verbal, Non-Verbal communication The documentation- Activity Report Writing – basics of NSS accounting – Annual Report – Press note and preparation</p>
3	<b>Rapport with Community and Programme Planning</b>
	<p><b>Working with individual group and community</b> Ice breaking- interaction games – conflict resolution</p> <p><b>Program planning</b> Programme planning- the concept and its features, requirements for successful implementation of program- program flow charting- feedback</p>
4	<b>Government Organisations /Non-Government Organisations</b>
	<p><b>Structure of Government Organisations and Non-Government Organisations</b> Government organisations (GO)- its meaning -Legal set up, functioning, Sources of funding Non-Government organisations (NGO)- its meaning -Legal set up, functioning, Sources of funding National Service Scheme(NSS)- Government organisations (GO) and Non-Government organisations (NGO)</p> <p><b>Government schemes for community development</b> Schemes os Government welfare departments for community development-provisions &amp; examples</p>

***Skill Enhancement Courses (SEC)***

**5.Foundation Course in NCC - II**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Disaster Management, Social Awareness and Community Development	05
2	Health and Hygiene	10
3	Drill with Arms	10
4	Weapon Training	10
5	Specialized Subject: Army Or Navy Or Air	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<p><b>Disaster Management, Social Awareness and Community Development</b></p> <p><b>Disaster Management:</b>  <b>Desired outcome:</b> The student shall gain basic information about civil defence organisation / NDMA &amp; shall provide assistance to civil administration in various types of emergencies during natural / manmade disasters</p> <ul style="list-style-type: none"> <li>• Civil Defence Organisation and Its Duties/ NDMA</li> <li>• Types of Emergencies/ Natural Disaster</li> <li>• Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake/ Accident etc.</li> <li>• 'Avan' model of NCC</li> </ul> <p><b>Social Awareness and Community Development:</b>  <b>Desired outcome:</b> The student shall have an understanding about social service and its need, about NGOs and shall participate in community action programmes for betterment of the community.</p> <ul style="list-style-type: none"> <li>• Basics of Social Service, Weaker Sections of Our Society and Their Needs</li> <li>• Social/ Rural Development Project: MNREGA, SGSY, NSAP etc.</li> <li>• Contribution of Youth towards Social Welfare</li> <li>• Civic Responsibilities</li> <li>• Causes &amp; Prevention of HIV/AIDS; Role of Youth</li> </ul>
2	<p><b>Health and Hygiene</b></p> <p><b>Desired outcome:</b> The student shall be fully aware about personal health and hygiene lead a healthy life style and foster habits of restraint and self awareness.</p> <ul style="list-style-type: none"> <li>• Structure and Functioning of the Human Body</li> <li>• Hygiene and Sanitation (Personal and Food Hygiene)</li> <li>• Infectious &amp; Contagious Diseases &amp; Their Prevention</li> </ul>
3	<p><b>Drill with Arms</b></p> <p><b>Desired outcome:</b> The students will demonstrate the sense of discipline, improve bearing, smartness, turnout, develop the quality of immediate and implicit obedience of orders, with good reflexes.</p> <ul style="list-style-type: none"> <li>• Attention, Stand at Ease and Stand Easy</li> <li>• Getting on Parade with Rifle and Dressing at the Order</li> <li>• Dismissing and Falling Out</li> <li>• Ground / Take Up Arms</li> <li>• Present From the Order and Vice-versa</li> <li>• General Salute, Salami Shastra</li> </ul>
4	<p><b>Weapon Training</b></p> <p><b>Desired outcome:</b> The student shall have basic knowledge of weapons and their use and handling.</p> <ul style="list-style-type: none"> <li>• Characteristics of a Rifle / Rifle Ammunition and its Fire Power</li> <li>• Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle</li> <li>• Stripping, Assembling, Care and Cleaning of 7.62mm SLR</li> <li>• Loading, Cocking and Unloading</li> <li>• The lying position, Holding and Aiming- I</li> <li>• Trigger control and firing a shot</li> <li>• Range procedure and safety precautions</li> <li>• Short range firing, Aiming- II -Alteration of sight</li> </ul>
Sr. No.	Modules / Units

<b>5</b>	<b>Specialized Subject: Army Or Navy Or Air</b>
	<p><b>Army</b></p> <p><b>Desired outcome:</b> The training shall instill patriotism, commitment and passion to serve the nation motivating the youth to join the defence forces. It will also acquaint, expose &amp; provide basic knowledge about armed, naval and air-force subjects</p> <p><b>A. Map reading</b></p> <ul style="list-style-type: none"> <li>• Introduction to types of Maps and Conventional signs</li> <li>• Scales and Grid system</li> <li>• Topographical forms and technical terms</li> <li>• Relief, contours and Gradients</li> <li>• Cardinal points and Types of North</li> <li>• Types of bearings and use of Service Protractor</li> <li>• Prismatic compass and its use and GPS</li> </ul> <p><b>B. Field Craft and Battle Craft</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Judging distance</li> <li>• Description of ground</li> <li>• Recognition, Description and Indication of landmarks and targets</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p><b>Navy</b></p> <p><b>A. Naval Communication</b></p> <ul style="list-style-type: none"> <li>• Introduction to Naval Modern Communication, Purpose and Principles <ul style="list-style-type: none"> <li>▪ Introduction of Naval communication</li> <li>▪ Duties of various communication sub-departments</li> </ul> </li> <li>• Semaphore <ul style="list-style-type: none"> <li>▪ Introduction of position of letters and prosigns</li> <li>▪ Reading of messages</li> <li>▪ Transmission of messages</li> </ul> </li> </ul> <p><b>B. Seamanship</b></p> <ul style="list-style-type: none"> <li>• <b>Anchor work</b> <ul style="list-style-type: none"> <li>▪ Parts of Anchor and Cable, their identification</li> </ul> </li> <li>• <b>Rigging</b> <ul style="list-style-type: none"> <li>▪ Types of ropes and breaking strength- stowing, maintenance and securing of ropes</li> <li>▪ Practical Bends and Hitches: Reef Knot, Half hitch, Clove Hitch, Rolling Hitch, Timber Hitch, Bow Line, Round Turn and Two half hitch and Bow line on the Bight and its basic elements and uses.</li> <li>▪ Introduction to Shackles, Hooks, Blocks and Derricks, Coiling Down and Splicing of rope</li> </ul> </li> </ul> <p><b>C. Boat work</b></p> <ul style="list-style-type: none"> <li>• Parts of Boat and Parts of an Oar</li> <li>• Instruction on boat Pulling- Pulling orders</li> <li>• Steering of boat under oars, Practical instruction on Boat Pulling, Precautions while pulling</li> </ul>

Sr. No.	Modules / Units
	<p style="text-align: center;"><i>OR</i></p> <p><b>Air</b></p> <p><b>A. Air frames</b></p> <ul style="list-style-type: none"><li>• Aircraft Controls</li><li>• Landing Gear</li></ul> <p><b>B. Instruments</b></p> <ul style="list-style-type: none"><li>• Basic Flight Instruments</li></ul> <p><b>C. Aircraft Particulars</b></p> <ul style="list-style-type: none"><li>• Aircraft Particulars (Type specific)</li></ul> <p><b>D. Aero modelling</b></p> <ul style="list-style-type: none"><li>• History of Aero modelling</li><li>• Materials used in Aero modelling</li><li>• Type of Aero models</li><li>• Flying/ Building of Aero models</li></ul>



***Skill Enhancement Courses (SEC)***

**5.Foundation Course in Physical Education- II**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Development of Fitness	10
2	Health, Fitness and Diseases	15
3	Yoga Education	10
4	Daily Schedule of Achieving Quality of Life and Wellness	10
	<b>Total</b>	<b>60</b>

Sr. No.	Modules / Units
1	<b>Development of Fitness</b>
	<ul style="list-style-type: none"> <li>• Benefits of physical fitness and exercise and principles of physical fitness</li> <li>• Calculation of fitness index level 1-4</li> <li>• Waist-hip ratio Target Heart Rate, BMI and types and principles of exercise (FITT)</li> <li>• Methods of training – continues, Interval, circuit, Fartlek and Plyometric</li> </ul>
2	<b>Health, Fitness and Diseases</b>
	<ul style="list-style-type: none"> <li>• Definition of obesity and its management</li> <li>• Communicable diseases, their preventive and therapeutic aspects</li> <li>• Factors responsible for communicable diseases</li> <li>• Preventive and therapeutic aspect of Communicable and non- communicable diseases</li> </ul>
3	<b>Yoga Education</b>
	<ul style="list-style-type: none"> <li>• Meaning and history of yoga</li> <li>• Ashtang yoga and types of yoga</li> <li>• Types of Suryanamaskar and Technique of Pranayam</li> <li>• Benefits of Yoga</li> </ul>
4	<b>Daily Schedule of Achieving Quality of Life and Wellness</b>
	<ul style="list-style-type: none"> <li>• Daily schedule based upon one's attitude, gender, age &amp; occupation.</li> <li>• Basic – module: - Time split for rest, sleep, diet, activity &amp; recreation.</li> <li>• Principles to achieve quality of life:- positive attitude, daily regular exercise, control over food habits &amp; healthy hygienic practices.</li> </ul>

***Elective Courses (EC)-  
Discipline Related Elective (DRE) Courses***

**6.Commerce I (Business Environment Paper-II)**

***Modules at a Glance***

Sr. No.	Modules	No. of Lectures
1	Business	12
2	Business Environment	11
3	Project Planning	12
4	Entrepreneurship	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Business</b>
	<p><b>Introduction:</b>Concept, Functions, Scope and Significance of business. Traditional and Modern Concept of business.</p> <p><b>Objectives of Business:</b>Steps in setting business objectives, classification of business objectives, Reconciliation of Economic and Social Objectives.</p> <p><b>New Trends in Business:</b> Impact of Liberalization, Privatization and Globalization, Strategy alternatives in the changing scenario, Restructuring and turnaround strategies</p>
2	<b>Business Environment</b>
	<p><b>Introduction:</b>Concept and Importance of business environment, Inter-relationship between Business and Environment</p> <p><b>Constituents of Business Environment:</b>Internal and External Environment, Educational Environment and its impact, International Environment – Current Trends in the World, International Trading Environment – WTO and Trading Blocs and their impact on Indian Business.</p>
3	<b>Project Planning</b>
	<p><b>Introduction:</b>Business Planning Process; Concept and importance of Project Planning; Project Report; feasibility Study types and its importance</p> <p><b>Business Unit Promotion:</b>Concept and Stages of Business Unit Promotion, Location – Factors determining location, and Role of Government in Promotion.</p> <p><b>Statutory Requirements in Promoting Business Unit:</b>Licensing and Registration procedure, Filing returns and other documents, Other important legal provisions</p>
4	<b>Entrepreneurship</b>
	<p><b>Introduction:</b> Concept and importance of entrepreneurship, factors Contributing to Growth of Entrepreneurship, Entrepreneur and Manager, Entrepreneur and Intrapreneur</p> <p><b>The Entrepreneurs:</b>Types of Entrepreneurs, Competencies of an Entrepreneur, Entrepreneurship Training and Development centers in India. Incentives to Entrepreneurs in India.</p> <p><b>Women Entrepreneurs:</b> Problems and Promotion.</p>

***Elective Courses (EC)-  
Discipline Related Elective(DRE) Courses***

**7. Business Economics II**

***Modules at a Glance***

<b>Sr. No.</b>	<b>Modules</b>	<b>No. of Lectures</b>
1	Market structure: Perfect competition and Monopoly	10
2	Pricing and Output Decisions under Imperfect Competition	15
3	Pricing Practices	10

4	Evaluating Capital Projects	10
<b>Total</b>		<b>45</b>

Sr. No.	Modules / Units
1	<b>Market structure: Perfect competition and Monopoly</b>
	Perfect competition and Monopoly models as two extreme cases - profit maximisation and the competitive firm's supply curve - Short run and long run equilibrium of a firm and of industry - monopoly - Sources of monopoly power – short run and long- run equilibrium of a firm under Monopoly
2	<b>Pricing and Output Decisions under Imperfect Competition</b>
	<p><b>Monopolistic competition:</b> competitive and monopolistic elements of monopolistic competition - equilibrium of a firm under monopolistic competition, monopolistic competition verses perfect competition- excess capacity and inefficiency - debate over role of advertising ( topics to be taught using case studies from real life examples)</p> <p><b>Oligopolistic markets:</b> key attributes of oligopoly - Collusive and non collusive oligopoly market - Price rigidity - Cartels and price leadership models (with practical examples)</p>
3	<b>Pricing Practices</b>
	<b>Cost oriented pricing methods:</b> cost – plus (full cost) pricing, marginal cost pricing, Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing (case studies on how pricing methods are used in business world)
4	<b>Evaluating Capital Projects</b>
	Meaning and importance of capital budgeting- steps in capital budgeting - +Techniques of Investment appraisal: Payback Period Method, Net Present Value Method, and Internal Rate of Return Method (with numerical examples)

**Revised Syllabus of Courses of B.Com. Programme at  
Semester I and II  
with effect from the Academic Year 2016-2017**

**Reference Books**

Reference Books
<b>Accountancy and Financial Management</b>
<ul style="list-style-type: none"> <li>• <i>Introduction to Accountancy</i> by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi <i>Advance Accounts</i> by Shukla&amp;Grewal, S. Chand and Company (P) Ltd., New Delhi</li> <li>• <i>Advanced Accountancy</i> by R. L Gupta and M Radhaswamy, S. Chand and Company (P) Ltd., New Delhi</li> <li>• <i>Modern Accountancy</i> by Mukherjee and Hanif, Tata Mc. Grow Hill &amp; Co. Ltd., Mumbai <i>Financial Accounting</i> by LesileChandwichk, Pentice Hall of India AdinBakley (P) Ltd.</li> <li>• <i>Financial Accounting for Management</i> by Dr. Dinesh Harsalekar, Multi-Tech. Publishing Co. Ltd., Mumbai.</li> <li>• <i>Financial Accounting</i> by P. C. Tulsian, Pearson Publications, New Delhi <i>Accounting Principles</i> by Anthony, R.N. and Reece J.S., Richard Irwin Inc.</li> <li>• <i>Financial Accounting</i> by Monga, J.R. Ahuja, GirishAhujaandShehgal Ashok, Mayur Paper Back</li> <li>• <i>Compendium of Statement &amp; Standard of Accounting</i>, ICAI.</li> <li>• <i>Indian Accounting Standards</i>, Ashish Bhattacharya, Tata Mc. Grow Hill &amp; Co. Ltd., Mumbai <i>Financial Accounting</i> by Williams , Tata Mc. Grow Hill &amp; Co. Ltd., Mumbai</li> <li>• <i>Company Accounting Standards</i> by ShrinivasanAnand, Taxman. <i>Financial Accounting</i> by V. Rajasekaran, Pearson Publications, New Delhi. <i>Introduction to Financial Accounting</i> by Horngren, Pearson Publications.</li> <li>• <i>Financial Accounting</i> by M. Mukherjee.M. Hanif. Tata McGraw Hill Education Private Ltd; New Delhi</li> </ul>
<b>Commerce</b>
<ul style="list-style-type: none"> <li>• <i>Business Organisation Management</i> Maheshwari, Rajendra P ,Mahajan, J.P.,International Book House</li> <li>• <i>Business Organisation</i>, Maheshwari, Rajendra P, Mahajan, J.P., International Book House</li> <li>• <i>Introduction To Commerce</i>, Vikram, Amit, Atlantic Pub</li> <li>• <i>A Course Book On Business Environment</i>, Cherunilam,Francis, Himalaya Pub</li> <li>• <i>Business Environment</i>, Cherunilam,Francis, Himalaya Pub</li> <li>• <i>Essentials Of Business Environment</i>, Aswathappa,K., Himalaya Pub</li> <li>• <i>Essentials Of Business Environment</i>, Aswathappa, Himalaya Pub</li> <li>• <i>Strategic Management</i>, Kapoor, Veekkas, Taxmann</li> <li>• <i>Strategic Management</i>, David,Fred R., Phi Leraning</li> <li>• <i>Strategic Management</i>, Bhutani, Kapil, Mark Pub.</li> <li>• <i>Strategic Management</i>, Bhutani, Kapil, Mark Pub.</li> <li>• <i>Entrepreneurship</i>, Hisrich, Robert D, McGraw Hill</li> <li>• <i>Entrepreneurship Development</i>, Sharma, K.C., Reegal Book Depot</li> <li>• <i>Service Marketing</i>, Temani, V.K., Prism Pub</li> <li>• <i>Service Marketing</i>, Temani, V.K., Prism Pub</li> <li>• <i>Management Of Service Sector</i>, Bhatia, B S, V P Pub</li> <li>• <i>Introduction To E – Commerce</i>, Dhawan, Nidhi, International Book House</li> <li>• <i>Introduction To Retailing</i>, Lusch,Robert F.,Dunne,Patrick M., Carver,James R.,Cengage Learning</li> <li>• <i>Retailing Management</i>, Levy Michael., Weitz Barton A,TataMcgraw Hill</li> </ul>



## Reference Books

### Business Economics

- Mehta, P.L.: *Managerial Economics – Analysis, Problem and Cases* (S. Chand & Sons, N. Delhi, 2000)
- Hirschey .M., *Managerial Economics*, Thomson South western (2003)
- Salvatore, D.: *Managerial Economics in a global economy* (Thomson South Western Singapore, 2001)
- Frank Robert.H, Bernanke. Ben S., *Principles of Economics* (Tata McGraw Hill (ed.3)
- Gregory Mankiw., *Principles of Economics*, Thomson South western (2002 reprint)
- Samuelson & Nordhas.: *Economics* (Tata McGraw Hills, New Delhi, 2002)
- Pal Sumitra, *Managerial Economics cases and concepts* (Macmillan, New Delhi, 2004)

### Business Communication

- Agarwal, AnjuD(1989) *A Practical Handbook for Consumers*, IBH.
- Alien, R.K.(1970) *Organisational Management through Communication*.
- Ashley,A(1992) *A Handbook Of Commercial Correspondence*, Oxford University Press.
- Aswalthapa, K (1991)*OrganisationalBehaviour*, Himalayan Publication, Mumbai.
- Atreya N and Guha (1994) *Effective Credit Management*, MMC School of Management, Mumbai.
- Bahl,J.C. and Nagamia,S.M. (1974) *Modern Business Correspondence and Minute Writing*.
- Balan,K.R. and Rayudu C.S. (1996) *Effective Communication*, Beacon New Delhi.
- Bangh, LSue, Fryar,Maridell and Thomas David A. (1998) *How to Write First Class Business Correspondence*, N.T.C. Publishing Group USA.
- Banerjee, Bani P (2005) *Foundation of Ethics in Mangement Excel Books 10.Businessworld Special Collector's Issue: Ethics and the Manager*
- Barkar, Alan(1993) *Making Meetings Work*, Sterling Publications Pvt. Ltd., New Delhi.
- Basu,C.R.(1998) *Business Organisation and Management*, T.M.H.New Delhi.
- Benjamin, James (1993) *Business and Professional Communication Concepts and Practices*, Harper Collins College Publishers, New York.
- Bhargava and Bhargava91971) *Company Notices, Meetings and Regulations*
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## **Question Paper Pattern (Practical Courses)**

Maximum Marks: 100

Questions to be set: 06

Duration: 03 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

<b>Question No</b>	<b>Particular</b>	<b>Marks</b>
Q-1	Objective Questions A) Sub Questions to be asked 12 and to be answered any 10 B) Sub Questions to be asked 12 and to be answered any 10 (*Multiple choice / True or False / Match the columns/Fill in the blanks)	20 Marks
Q-2	Full Length Practical Question <b>OR</b>	15 Marks
Q-2	Full Length Practical Question	15 Marks
Q-3	Full Length Practical Question <b>OR</b>	15 Marks
Q-3	Full Length Practical Question	15 Marks
Q-4	Full Length Practical Question <b>OR</b>	15 Marks
Q-4	Full Length Practical Question	15 Marks
Q-5	Full Length Practical Question <b>OR</b>	15 Marks
Q-5	Full Length Practical Question	15 Marks
Q-6	A) Theory questions B) Theory questions <b>OR</b>	10 Marks 10 Marks
Q-6	Short Notes To be asked 06 To be answered 04	20 Marks

**Note:**

**Practical question of 15 marks may be divided into two sub questions of 7/8 and 10/5Marks.**

## **Question Paper Pattern (Theoretical Courses)**

Maximum Marks: 100

Questions to be set: 06

Duration: 03 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

<b>Question No</b>	<b>Particular</b>	<b>Marks</b>
Q-1	Objective Questions A) Sub Questions to be asked 12 and to be answered any 10 B) Sub Questions to be asked 12 and to be answered any 10 (*Multiple choice / True or False / Match the columns/Fill in the blanks)	20 Marks
Q-2	Full Length Question <b>OR</b>	15 Marks
Q-2	Full Length Question	15 Marks
Q-3	Full Length Question <b>OR</b>	15 Marks
Q-3	Full Length Question	15 Marks
Q-4	Full Length Question <b>OR</b>	15 Marks
Q-4	Full Length Question	15 Marks
Q-5	Full Length Question <b>OR</b>	15 Marks
Q-5	Full Length Question	15 Marks
Q-6	A) Theory questions B) Theory questions <b>OR</b>	10 Marks 10 Marks
Q-6	Short Notes To be asked 06 To be answered 04	20 Marks

**Note:**

**Theory question of 15 marks may be divided into two sub questions of 7/8 and 10/5Marks.**

# University of Mumbai



**B.Com. (Actuarial  
Studies) Programme  
Three Year Integrated Programme-  
Six Semesters  
*Course Structure***

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

**To be implemented from Academic Year- 2017-2018  
Progressively**

***Board of Studies-in-Commerce***



**B.Com. (Actuarial studies) Programme**  
**Under Choice Based Credit, Grading and Semester System**  
**Course Structure**

**F.Y.B.Com. (Actuarial Studies)**

(To be implemented from Academic Year- 2017-2018)

No. of Courses	Semester I	Credits	No. of Courses	Semester II	Credits
<b>1</b>	<b>Elective Courses (EC)</b>		<b>1</b>	<b>Elective Courses (EC)</b>	
1	Financial Accounting (Elements of Financial Accounting) - Paper I	<b>03</b>	1	Financial Accounting (Accounting Standards on Banking, Insurance, Employee Benefits, Pensions and Financial Instruments) - Paper II	<b>03</b>
2	Insurance Business (General insurance) Paper I	<b>03</b>	2	Insurance Business (Life and Health Contingencies) Paper II	<b>03</b>
3	Financial Mathematics –Paper I	<b>03</b>	3	Financial Mathematics –Paper II	<b>03</b>
<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>		<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>	
4	Business Communication (Theoretical) - Paper I	<b>03</b>	4	Business Communication– Paper II	<b>03</b>
5	Foundation Course (same as other B.Com programmes) - Paper I/ NSS/ NCC/ Physical Education	<b>03</b>	5	Foundation Course (Value Education & Soft Skill) - Paper II/ NSS/ NCC/ Physical Education	<b>03</b>
<b>3</b>	<b>Core Courses (CC)</b>		<b>3</b>	<b>Core Courses (CC)</b>	
6	Environmental Studies Paper I	<b>03</b>	6	Business Environment Paper II (General commercial knowledge, Entrepreneurship and Business Development)	<b>03</b>
7	Business Economics (Micro & Macro Economics) – Paper I	<b>03</b>	7	Business Economics - Paper II	<b>03</b>
<b>Total Credits</b>		<b>21</b>	<b>Total Credits</b>		<b>21</b>

**Comment [H1]:** "Appreciation of grammar and literature" may be more useful to build a foundation.

In the above mentioned course structure we propose to adopt the existing syllabus taught under the current B.Com Course namely Financial Accounting Paper I, Business Communication Paper I & II, Foundation Course I & II, Environmental Studies Paper I and Business Economics Paper I & II. The Commerce Paper I taught in Semester I under the current programme shall be included as Business Environment Paper II in Semester II.

## S.Y.B.Com. (Actuarial Studies)

*(To be implemented from Academic Year- 2018-2019)*

No. of Courses	Semester III	Credits	No. of Courses	Semester IV	Credits
<b>1</b>	<b>Elective Courses (EC)</b>		<b>1</b>	<b>Elective Courses (EC)</b>	
1,2 & 3	*Any three courses from the following list of the courses	<b>09</b>	1,2 & 3	*Any three courses from the following list of the courses	<b>09</b>
<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>		<b>2</b>	<b>Ability Enhancement Courses (AEC)</b>	
4	Information Technology in service sector – Paper I	<b>03</b>	4	Information Technology in insurance – Paper II	<b>03</b>
<b>3</b>	<b>Core Courses (CC)</b>		<b>3</b>	<b>Core Courses (CC)</b>	
5	Management (Introduction to Management) – Paper I	<b>03</b>	5	Management (Introduction to Management) - Paper II	<b>03</b>
6	Insurance Laws and Regulation –Paper I	<b>03</b>	6	Insurance Laws and Regulation –Paper II	<b>03</b>
7	Mathematical modeling (Survival Models)- Paper I	<b>03</b>	7	Mathematical modelling- (Stochastic Models) Paper II	<b>03</b>
<b>Total Credits</b>		<b>21</b>	<b>Total Credits</b>		<b>21</b>

**Comment [H2]:** IT skills in spreadsheets namely financial, statistical, data functions. Also, an appreciation of modeling, and basic programming around VB.

**Comment [H3]:** Insurance industry uses software like SPSS, STATA, etc which are based on statistics. Maybe this should be spelt out?

**Comment [H4]:** “Structures affecting National Insurance Regulation and Supervision” e.g. IAIS, ICPs, World Bank Pillars of Pension, UNFCCC affecting agricultural insurance premium and farmers’ loss and damage, etc.

It would be worthy to provide a macro view of law and regulation from India’s signing various treaties and pressures from multi lateral organizations in this semester and then move to bespoke insurance regulation and supervision in India in the next semester.

**Comment [H5]:** Of insurance companies, banks, NBFCs and pension funds? I recommend the auditing paper focuses on BFSI sector only.

<b>*List of Discipline Related Elective(DRE) Courses for Semester III (Any One)</b>		<b>*List of Discipline Related Elective(DRE) Courses for Semester IV (Any One)</b>	
1	Actuarial Risk Management-Paper I	1	Actuarial Risk Management-Paper II
2	Pricing and Valuation in Insurance Paper I	2	Pricing and Valuation in Insurance Paper II
3	Auditing (Techniques of Auditing and Audit Procedures)- Paper I	3	Auditing (Techniques of Auditing and Audit Procedures)- Paper II
4	Documentation ,Analysis and Reporting Paper I	4	Documentation ,Analysis and Reporting Paper II
5	Innovations in insurance sector (Relating to Climate insurance, Crop insurance, Micro Insurance, Deposit insurance etc.,)Paper I	5	Innovations in insurance sector (Relating to Climate insurance, Crop insurance, Micro Insurance, Deposit insurance etc.,) Paper II
<b>Note: Course/ Subject selected in Semester III will continue in Semester IV</b>			



## T.Y.B.Com. (Actuarial Studies)

(To be implemented from Academic Year- (2019-2020))

No. of Courses	Semester V	Credits	No. of Courses	Semester VI	Credits
<b>1</b>	<b>Elective Courses (EC)</b>		<b>1</b>	<b>Elective Courses (EC)</b>	
1,2,3 & 4	*Any four courses from the following list of the courses	<b>12</b>	1,2,3 & 4	*Any four courses from the following list of the courses	<b>12</b>
<b>2</b>	<b>Core Courses (CC)</b>		<b>2</b>	<b>Core Courses (CC)</b>	
5	Customer Relationship Management –Paper I	<b>03</b>	5	Customer Relationship Management –Paper II	<b>03</b>
<b>3</b>	<b>*Project Work</b>		<b>3</b>	<b>*Project Work</b>	
6	Project Work I	<b>03</b>	6	Project Work II	<b>03</b>
<b>Total Credits</b>		<b>18</b>	<b>Total Credits</b>		<b>18</b>

**Note:** Project work is considered as a special course involving application of knowledge in solving/analyzing/exploring a real life situation/ difficult problem. Project work would be of 03 credits. A project work may be undertaken in any area of Elective Courses/ study area

*List of Elective Courses for Semester V (Any Four)		*List of Elective Courses for Semester VI (Any Four)	
1	Advanced Financial Mathematics paper I	1	Advanced Financial Mathematics Paper II
2	Investment Analysis-Paper I	2	Investment Analysis-Paper II
3	<b>Behavioural Finance</b> (OR Functional language studies Paper I ( Hindi, Marathi or Sanskrit) We suggest language option if it does not affect the norms)	3	<b>International insurance contracts (OR</b> Functional language studies Paper II(Any Foreign Language other than English) We suggest language option if it does not affect the norms)
4	Insurance Claim negotiation and settlement - Paper I	4	Insurance Claim negotiation and settlement - Paper II
5	Life Contingencies Paper I	5	Life Contingencies Paper II
6	Mathematics of Demography	6	Enterprise Risk Management
<b>Note: Course/ Subject selected in Semester V will continue in Semester VI</b>			

Project work may be undertaken by the students by choosing a specific area of insurance like General, life, vehicle, fire or a general study relating to problems in settlement. Valuation of business or build a model for any of the chosen area of . It may include drawing an insurance contract for crop insurance such that the insurance benefit may reach the bottom of the pyramid.

Suggestion for functional language is given because almost all of the excluded population in the insurance sector needs to be addressed with the language they are familiar with. Job opportunities will increase with this endeavour.

**Comment [H6]:** This paper could be called 'Advanced Financial Economics'. It would cover financial investments and derivatives.

**Comment [H7]:** Instead of claims negotiation (which should be covered earlier in India insurance regulation), two paper on 'Statistical modeling' may be appropriate.

I recommend these two papers are moved to SY BCom and the papers on Survival Models and Stochastic Models tested in TY BCom.

**Comment [H8]:** Math of Demography will be covered in survival models. Instead could 'Behavioral Finance' become a paper here? That would make language studies an option at no. 3 an 'option within an option'. It is necessary that students appreciate national/ state language at a greater depth and in its application to the commercial environment.