# University of Mumbai



Bachelor of Commerce (B.Com)
Programme
Three Year Integrated Programme Six Semesters
Course Structure

Under Choice Based Credit, Grading and Semester System

To be implemented from Academic Year- 2016-2017 Progressively

Faculty of Commerce

## B.Com Programme

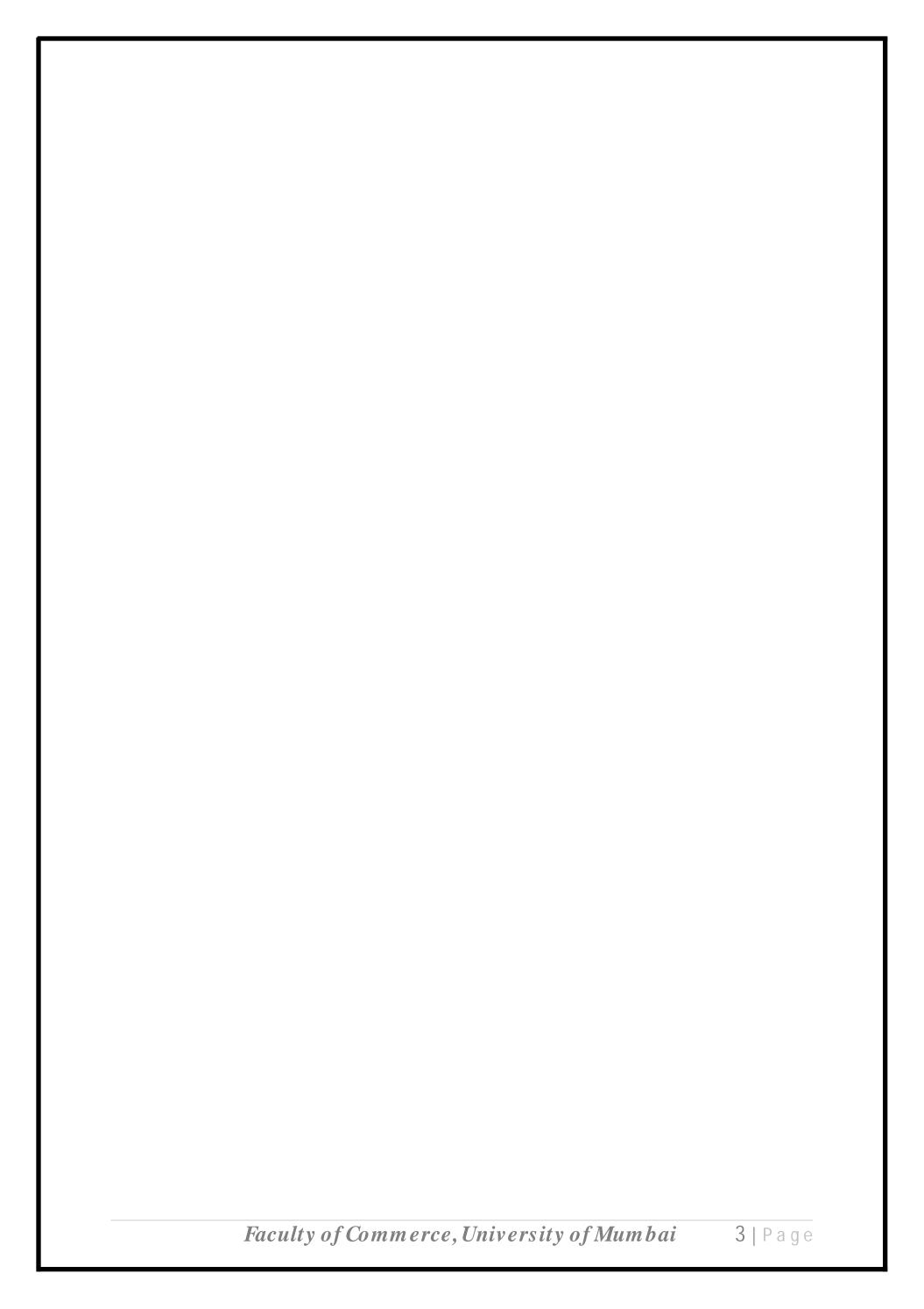
Under Choice Based Credit, Grading and Semester System Course Structure

F.Y.B.Com

(To be implemented from Academic Year- 2016-2017)

No. of Course s	Semester I	Credits	No. of Course s	Semester II	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE)	) Courses	1A	Discipline Specific Elective (DS)	E) Courses
1	Accountancy and Financial Management - I	03	1	Accountancy and Financial Management - II	03
1B	Discipline Related Elective(DRE Courses		1B	Discipline Related Elective(DR Courses	E)
2	Commerce - I	03	2	Commerce - II	03
3	Business Economics - I	03	3	Business Economics - II	03
2	Ability Enhancement Courses (AEC)		2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulso Courses (AECC)	ory	2A	Ability Enhancement Compuls Courses (AECC)	rory
4	Business Communication - I	03	4	Business Communication II	03
5	Environmental Studies I	03	5	Environmental Studies II	03
2B	*Skill Enhancement Courses (Sa	EC)	2B	**Skill Enhancement Courses	(SEC)
6	Any one course from the following list of the courses	02	6	Any one course from the following list of the courses	02
3	Core Courses (CC)		3	Core Courses (CC)	
7	Mathematical and Statistical Techniques - I	03	7	Mathematical and Statistical Techniques - II	03
Total Credits		20		Total Credits	20

*List of Skill Enhancement Courses (SEC) for Semester I (Any One)			**List of Skill Enhancement Courses (SEC) for Semester II (Any One)		
1	Foundation Course - I	1	Foundation Course - II		
2	Foundation Course in NSS - I	2	Foundation Course in NSS - II		
3	Foundation Course in NCC - I	3	Foundation Course in NCC - II		
4	Foundation Course in Physical Education - I	4	Foundation Course in Physical Education - II		
Not	Note: Course selected in Semester I will continue in Semester II				



### S.Y.B.Com

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

No. of Course s	Semester III	Credits	No. of Course s	Semester IV	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE)	) Courses	1A	Discipline Specific Elective(DSE	E) Courses
1	Accountancy and Financial Management III	03	1	Accountancy and Financial Management IV	03
2	Financial Accounting and Auditing V - Introduction to Management Accounting	03	2	Financial Accounting and Auditing VI - Auditing	03
1B	Discipline Related Elective (DRE Courses	)	1B	Discipline Related Elective(DRI Courses	E)
3	Commerce III	03	3	Commerce IV	03
4	Business Economics III	03	4	Business Economics IV	03
2	Ability Enhancement Courses (A	4 <i>EC)</i>	2	Ability Enhancement Courses (AEC)	
2A	*Skill Enhancement Courses (Si Group A	EC)	2A	**Skill Enhancement Courses ( Group A	(SEC)
5	*Any one course from the following list of the courses	03	5	*Any one course from the following list of the courses	03
2B	*Skill Enhancement Courses (Si Group B	EC)	2B	**Skill Enhancement Courses ( Group B	(SEC)
6	Any one course from the following list of the courses	02	6	Any one course from the following list of the courses	02
3	Core Courses (CC)		3	Core Courses (CC)	
7	Business Law I	03	7	Business Law II	03
	Total Credits	20		Total Credits	20

*Lis	*List of Skill Enhancement Courses (SEC) Group A for Semester III (Any One)		st of Skill Enhancement Courses (SEC) Group A for Semester IV (Any One)
1	Advertising I	1	Advertising II
2	Field Sales Management I	2	Field Sales Management II
3	Public Relations I	3	Public Relations II
4	Mass Communication I	4	Mass Communication II
5	Travel & Tourism Management Paper I	5	Travel & Tourism Management II
6	Journalism I	6	Journalism II
7	Company Secretarial Practice I	7	Company Secretarial Practice II

8	Rural Development I	8	Rural Development II
9	Co-operation I	9	Co-operation II
10	Mercantile Shipping I	10	Mercantile Shipping II
11	Indian Economic Problem I	11	Indian Economic Problem II
12	Computer Programming I	12	Computer Programming II
13	Logistic and Supply Chain Management I	13	Logistic and Supply Chain Management I
14	Direct & Indirect Taxation I	14	Direct & Indirect Taxation II
Not	e: Course selected in Semester III will continue	$e$ in S $\epsilon$	mester IV
		**L	ist of Skill Enhancement Courses (SEC) Group B
*Lis	t of Skill Enhancement Courses (SEC) Group B for Semester III (Any One)		for Semester IV (Any One)
1	Foundation Course - III	1	Foundation Course - IV
1	Foundation Course - III Foundation Course in NSS - III	1 2	Foundation Course - IV Foundation Course in NSS - IV
2	Foundation Course in NSS - III	2	Foundation Course in NSS - IV

### T.Y.B.Com

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

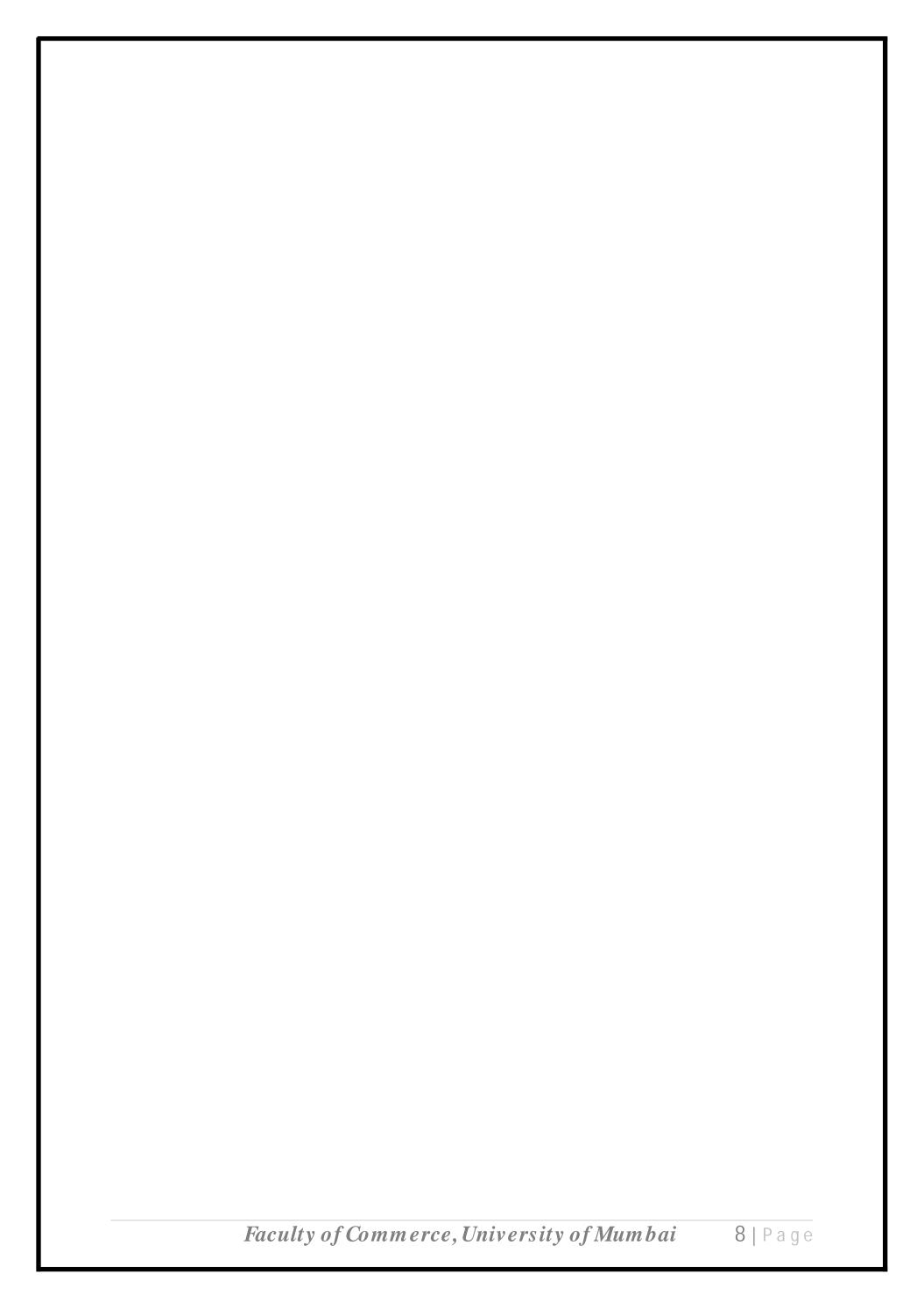
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No. of Course s	Semester V	Credits	No. of Course s	Semester VI	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE)	Courses	1A	Discipline Specific Elective (DSE	) Courses
1 & 2	*Any one group of courses from the following list of the Groups (A/B/C/D/E/F)	04+04	1 & 2	*Any one group of courses from the following list of the Groups (A/B/C/D/E/F)	04+04
1B	Discipline Related Elective(DRE,	) Courses	1B	Discipline Related Elective(DRE Courses	=)
3	Commerce V	03	3	Commerce VI	03
4	**Any one course from the following list of the courses	03	4	**Any one course from the following list of the courses	03
5	Business Economics V	03	5	Business Economics VI	03
2	*Project Work		2	*Project Work	
6	Project Work I	03	6	Project Work II	03
	Total Credits	20		Total Credits	20

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 discipline specific courses/ discipline related elective courses

	courses, discipline related elective courses						
	*List of groups of	*List of groups of					
	Discipline Specific Elective(DSE) Courses		Discipline Specific Elective(DSE) Courses				
	for Semester V (Any One Group)		for Semester VI (Any One Group)				
	Group A: Advar	iced A	Accountancy				
1	Financial Accounting and Auditing VII -	1	Financial Accounting and Auditing IX -				
	Financial Accounting		Financial Accounting				
2	Financial Accounting and Auditing VIII -	2	Financial Accounting and Auditing X -				
	Cost Accounting		Cost Accounting				
	Group B: Business Management						
1	Business Studies Paper I	1	Business Studies Paper III				
2	Business Studies Paper II	2	Business Studies Paper IV				
	Group C: Bank	ing a	nd Finance				
1	Banking and Finance Paper I	1	Banking and Finance Paper III				
2	Banking and Finance Paper II	2	Banking and Finance Paper IV				
	Group D:	Comi	merce				
1	Commerce Paper I	1	Commerce Paper III				
2	Commerce Paper II	2	Commerce Paper IV				
	Group E: Quanti	tative	e Techniques				
1	Quantitative Techniques Paper I	1	Quantitative Techniques Paper III				
2	Quantitative Techniques Paper II	2	Quantitative Techniques Paper IV				
	Group F:	Econ	omics				

1	Economics Paper I	1	Economics Paper III			
2	Economics Paper II	2	Economics Paper IV			
No	Note: Group selected in Semester V will continue in Semester VI					

k	*List of Discipline Related Elective(DRE) Courses for Semester V (Any One)		**List of Discipline Related Elective(DRE)  Courses  for Semester VI (Any One)
1	Trade Unionism and Industrial Relations	1	Trade Unionism and Industrial Relations.
2	Paper I  Computer system & Applications Paper I	2	Paper II Computer system & Applications Paper II
3	Export Marketing Paper I	3	Export Marketing Paper II
4	Marketing Research Paper I	4	Marketing Research Paper II
5	Investment Analysis Portfolio Paper I	5	Investment Analysis Portfolio Paper II
6		6	, ,
7	Transport Management Paper I	7	Transport Management Paper II
	Entrepreneurship& M.S.S.I. Paper I		Entrepreneurship& M.S.S.I. Paper II
8	International Marketing Paper I	8	International Marketing Paper II
9	Merchant Banking Paper I	9	Merchant Banking Paper II
10	Direct & Indirect Taxation Paper I	10	Direct & Indirect Taxation Paper II
11	Labour Welfare & Practice Paper I	11	Labour Welfare & Practice Paper II
12	Purchasing & Store keeping Paper I	12	Purchasing & Store keeping Paper II
13	Inventory Management & Cost Reduction Paper I	13	Inventory Management & Cost Reduction Paper II
14	Insurance Paper I	14	Insurance Paper II
15	Banking Law & Practice Paper I	15	Banking Law & Practice Paper II
16	Regional Planning Paper I	16	Regional Planning Paper II
17	Rural Marketing Paper I	17	Rural Marketing Paper II
18	Elements of Operational Research Paper I	18	Elements of Operational Research Paper II
19	Psychology of Human Behaviour at work Paper I	19	Psychology of Human Behaviour at work Paper II
Note	e: Course selected in Semester V will continu	ie in S	Semester VI



# University of Mumbai



Revised Syllabus and Question Paper Pattern of Courses of B.Com. Programme First Year Semester I and II

Under Choice Based Credit, Grading and Semester System

(To be implemented from Academic Year- 2016-2017)

Faculty of Commerce

## B.Com. Programme

Under Choice Based Credit, Grading and Semester System Course Structure

F.Y.B. Com.

(To be implemented from Academic Year- 2016-2017)

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No. of Course s	Semester I	Credits	No. of Course s	Semester II	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE)	) Courses	1A	Discipline Specific Elective (DS)	E) Courses
1	Accountancy and Financial Management I	03	1	Accountancy and Financial Management II	03
1B	Discipline Related Elective(DRE Courses		1B	Discipline Related Elective(DR Courses	E)
2	Commerce I	03	2	Commerce II	03
3	Business Economics I	03	3	Business Economics II	03
2	2 Ability Enhancement Courses (AEC)		2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulso Courses (AECC)	ory	2A	Ability Enhancement Compuls Courses (AECC)	rory
4	Business Communication I	03	4	Business Communication II	03
5	Environmental Studies I	03	5	Environmental Studies II	03
2B	*Skill Enhancement Courses (Si	EC)	2B	**Skill Enhancement Courses	(SEC)
6	Any one course from the following list of the courses	02	6	Any one course from the following list of the courses	02
3	Core Courses (CC)		3	Core Courses (CC)	
7	Mathematical and Statistical Techniques I	03	7	Mathematical and Statistical Techniques II	03
Total Credits		20		Total Credits	20

*List of Skill Enhancement Courses (SEC) for Semester I (Any One)		**List of Skill Enhancement Courses (SEC) for Semester II (Any One)			
1	Foundation Course - I	1	Foundation Course - II		
2	Foundation Course in NSS - I	2	Foundation Course in NSS - II		
3	Foundation Course in NCC - I	3	Foundation Course in NCC - II		
4	Foundation Course in Physical Education - I	4	Foundation Course in Physical Education - II		
Not	Note: Course selected in Semester I will continue in Semester II				

## B.Com. Programme

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

(To be implemented from Academic Year- 2016-2017)

## Semester I

No. of Courses	Semester I	Credits
1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE) Courses	
1	Accountancy and Financial Management I	03
1B	Discipline Related Elective(DRE) Courses	
2	Commerce I	03
3	Business Economics I	03
2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulsory Courses (AECC)	
4	Business Communication I	03
5	Environmental Studies I	03
2B	*Skill Enhancement Courses (SEC)	
6	Any one course from the following list of the courses	02
3	Core Courses (CC)	
7	Mathematical and Statistical Techniques I	03
	Total Credits	20

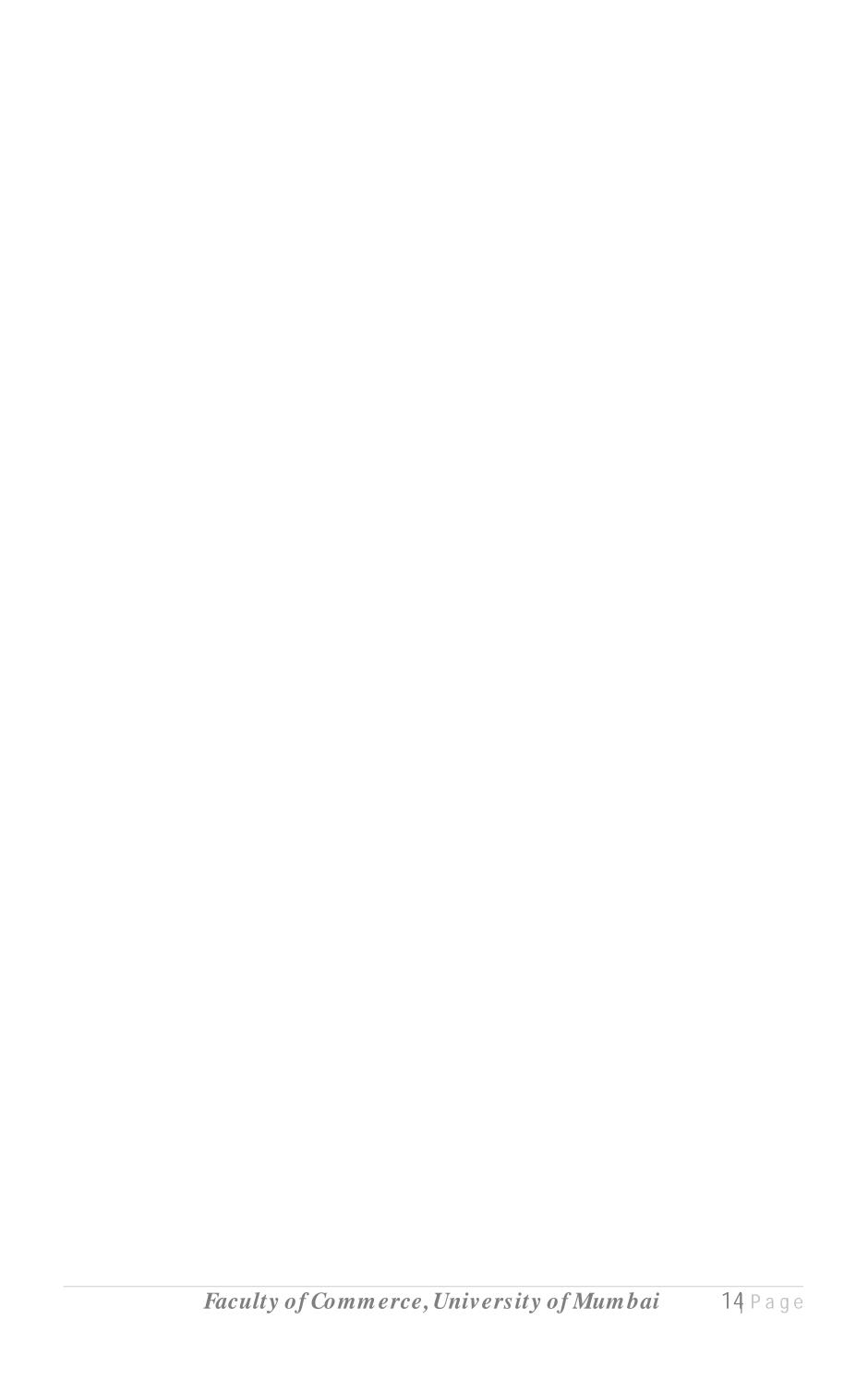
*List of Skill Enhancement Courses (SEC) for Semester I (Any One)	
1	Foundation Course - I
2	Foundation Course in NSS - I
3	Foundation Course in NCC - I
4	Foundation Course in Physical Education - I

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

## 1. Accountancy and Financial Management I

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
	Total	60

Sr. No.	Modules / Units
1	Accounting standards issued by ICAI and Inventory valuation
	<ul> <li>Accountingstandards:         Concepts, benefits, procedures for issue of accounting standards. Various AS:         AS —1: Disclosure of Accounting Policies         Purpose, Areas of Policies, Disclosure of Policies, Disclosure of Change in Policies, Illustrations         AS —2: Valuation of Inventories (Stock)         Meaning, Definition, Applicability, Measurement of Inventory, Disclosure in Final Account, Explanation with Illustrations.         AS —9: Revenue Recognition         Meaning and Scope, Transactions excluded, Sale of Goods, Rendering of Services, Effects of Uncertainties, Disclosure, Illustrations.</li> </ul>
	<ul> <li>Inventory Valuation         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	Final Accounts
	Expenditure: Capital, Revenue Receipts: Capital, Revenue Adjustment and Closing Entries Final accounts of Manufacturing concerns (Proprietary Firm)
3	Departmental Accounts
	Meaning Basis of Allocation of Expenses and Incomes/Receipts Inter Departmental Transfer: at Cost Price and Invoice Price Stock Reserve Departmental Trading and Profit & Loss Account and Balance Sheet
4	Accounting for Hire Purchase
	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)



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

### 2. Commerce I

Sr. No.	Modules	No. of Lecture s
1	Business	12
2	Business Environment	11
3	Project Planning	12
4	Entrepreneurship	10
	Total	45

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

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

### 3. Business Economics I

Sr. No.	Modules	No. of Lectures
1	Introduction	10
2	Demand Analysis	15
3	Supply and Production Decisions	10
4	Cost of Production	10
	Total	45

Sr. No.	Modules / Units
1	Introduction
	Scope and Importance of Business Economics - 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
2	Demand Analysis
	Demand Function - 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  Demand estimation and forecasting: Meaning and significance - methods of demand estimation: survey and statistical methods (numerical illustrations on trend analysis and simple linear regression)
3	Supply and Production Decisions
	Production function: 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
4	Cost of Production
	Cost concepts: 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)  Extensions of cost analysis: cost reduction through experience - LAC and Learning curve - Break even analysis (with business applications)

### Ability Enhancement Courses (AEC)

### 4. Business Communication I

#### Modules at a Glance

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

#### 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	Theory of Communication	
	Concept of Communication: Meaning, Definition, Process, Need, Feedback Emergence of Communication as a key concept in the Corporate and Global world Impact of technological advancements on Communication Channels and Objectives of Communication: Channels-Formal and Informal- Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees (A brief introduction to these objectives to be given) Methods and Modes of Communication:  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	
2	Obstacles to Communication in Business World	
	Obstacles to Communication in Business World  Problems in Communication / Barriers to Communication: Physical / Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers Listening: Importance of Listening Skills, Cultivating good Listening Skills —4 Introduction to Business Ethics: 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, caster religion, appearance and sexual orientation at the workplace Piracy, Insurance, Child Labour	
3	Business Correspondence	
	Theory of Business Letter Writing:  Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing,  Personnel Correspondence:  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)]	
Sr. No.	Modules / Units	
4	Language and Writing Skills	
	Commercial Terms used in Business Communication Paragraph Writing: 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.] Activities  § Listening Comprehension § Remedial Teaching § Speaking Skills: Presenting a News Item, Dialogue and Speeches § Paragraph Writing: Preparation of the first draft, Revision and Self —Editing, Rules of spelling. § Reading Comprehension: Analysis of texts from the fields of Commerce and Management	

## Ability Enhancement Courses (AEC)

### 5. Environmental Studies I

Sr. No.	Modules	No. of Lecture s
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
	Total	60

Sr. No.	Modules / Units
1	Environment and Ecosystem
	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.
2	Natural Resources and Sustainable Development
	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
3	Populations and Emerging Issues of Development
	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 environement- Environment and Human Health —Human Development Index —The World Happiness Index
4	Urbanisation and Environment
	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	Reading of Thematic Maps and Map Filling
	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

### Skill Enhancement Courses (SEC)

### 6. Foundation Course - I

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No.	Modules / Units
1	Overview of Indian Society
	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
2	Concept of Disparity 1
	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
3	Concept of Disparity 2
	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
4	The Indian Constitution
	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
5	Significant Aspects of Political Processes
	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)

### 6. Foundation Course in NSS - I

Sr. No.	Modules	No. of Lectures
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
	Total	45

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

### Skill Enhancement Courses (SEC)

### 6. Foundation Course in NCC - I

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No.	Modules / Units
1	Introduction to NCC, National Integration & Awareness
	Desired outcome: 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.  • Genesis, Aims, Objectives of NCC & NCC Song  • Organisation & Training  • Incentives & Benefits  • Religions, Culture, Traditions and Customs of India  • National Integration: Importance and Necessity  • Freedom Struggle
2	Drill: Foot Drill
	<ul> <li>Desired outcome: 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.</li> <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	Adventure Training, Environment Awareness and Conservation
	Adventure Training Desired outcome: The students will overcome fear & inculcate within them the sense of adventure, sportsmanship, espirit-d-corp and develop confidence, courage, determination, diligence and quest for excellence.  • Any Two such as —Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc Environment Awareness and Conservation Desired outcome: The student will be aware of the conservation of natural resources and protection of environment.  • Natural Resources —Conservation and Management • Water Conservation and Rainwater Harvesting

Sr. No.	Modules / Units
4	Personality Development and Leadership
	Desired outcome: The student will develop an all-round personality with adequate leadership traits to deal / contribute effectively in life.  Introduction to Personality Development Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological Self Awareness Know yourself/Insight Change Your Mind Set Communication Skills: Group Discussion / Lecturettes (Public Speaking) Leadership Traits Types of Leadership
5	Specialized Subject: Army Or Navy Or Air
	Army Desired outcome: 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 & provide basic knowledge about armed, naval and air-force subjects  A. Armed Force  Basic organisation of Armed Forces  Organisation of Army  Badges and Ranks  Introduction to Infantry and weapons and equipments  Characteristics of 7.62mm SLR Rifle, Ammunition, Fire power, Stripping, Assembling and Cleaning  Military history  Biographies of renowned Generals (Carriapa / Sam Manekshaw)  Indian Army War Heroes- PVCs  Communication  Types of Communications  Characteristics of Wireless Technologies (Mobile, Wi-Fi etc.)
	OR
	<ul> <li>Navy</li> <li>A. Naval orientation and service subjects</li> <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> <li>B. Ship and Boat Modelling</li> </ul>
	Principles of Ship Modelling

	Maintenance and Care of tools
Sr. No.	Modules / Units
	<ul> <li>C. Search and Rescue</li> <li>SAR Organization in the Indian ocean</li> <li>D. Swimming</li> <li>Floating for three minutes and Free style swimming for 50 meters</li> </ul>
	OR
	AIR A. General Service Knowledge

### Skill Enhancement Courses (SEC)

## 6. Foundation Course in Physical Education - I

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No.	Modules / Units
1	Introduction to Basic Relevant concepts in Physical Education
	<ul> <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>
2	Components of Physical Fitness
	<ul> <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>
3	Testing Physical Fitness
	<ul> <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>
4	Effect of Exercise on various Body System
	<ul> <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>

### Core Courses (CC)

## 7. Mathematical and Statistical Techniques I

#### Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Shares and Mutual Funds	15
2	Permutation, Combination and Linear Programming Problems	15
3	Summarization Measures	15
4	Elementary Probability Theory	15
5	Decision Theory	15
	Total	75

#### 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	Shares and Mutual Funds
	<ul> <li>Shares: Concept of share, face value, market value, dividend, equity shares, preferential shares, bonus shares. Simple examples.</li> <li>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.)</li> </ul>
2	Permutation, Combination and Linear Programming Problems
	<ul> <li>Permutation and Combination: Factorial Notation, Fundamental principle of counting, Permutation as arrangement, Simple examples, combination as selection, Simple examples, Relation between n Cr and n Pr Examples on commercial application of permutation and combination</li> <li>Linear Programming Problem: Sketching of graphs of (i) linear equation Ax + By + C= 0 (ii) linear inequalities. Mathematical Formulation of Linear Programming Problems upto 3 variables. Solution of Linear Programming Problems using graphical method up to two variables.</li> </ul>
3	Summarization Measures
	<ul> <li>Measures of Central Tendencies: Definition of Average, Types of Averages: Arithmetic Mean, Median, and Mode for grouped as well as ungrouped data. Quartiles, Deciles and Percentiles. Using Ogive locate median and Quartiles. Using Histogram locate mode. Combined and Weighted mean.</li> <li>Measures of Dispersions: Concept and idea of dispersion. Various measures Range, Quartile Deviation, Mean Deviation, Standard Deviation, Variance, Combined Variance.</li> </ul>
4	Elementary Probability Theory
	<ul> <li>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, Complimentary events. Classical definition of Probability, Addition theorem (without proof), conditional probability. Independence of Events: P(A ∩ B) = P(A) P(B). Simple examples.</li> <li>Random Variable: Probability distribution of a discrete random variable; Expectation and Variance of random variable, simple examples on probability distributions.</li> </ul>
5	Decision Theory
	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.

## B.Com. Programme

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

(To be implemented from Academic Year- 2016-2017)

## Semester II

N. C.		
No. of Courses	Semester II	Credits
1	Elective Courses (EC)	
1A	Discipline Specific Elective (DSE) Courses	
1	Accountancy and Financial Management II	03
1B	Discipline Related Elective (DRE) Courses	
2	Commerce II	03
3	Business Economics II	03
2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulsory Courses (AECC)	
4	Business Communication II	03
5	Environmental Studies II	03
2B	**Skill Enhancement Courses (SEC)	
6	Any one course from the following list of the courses	02
3	Core Courses (CC)	
7	Mathematical and Statistical Techniques II	03
	Total Credits	20

*List of Skill Enhancement Courses (SEC) for Semester II (Any One)	
1	Foundation Course - II
2	Foundation Course in NSS - II
3	Foundation Course in NCC - II
4	Foundation Course in Physical Education - II

# Elective Courses (EC)-Discipline Specific Elective (DSE) Courses

# 1. Accountancy and Financial Management II

Sr. No.	Modules	No. of Lectures
1	Accounting from Incomplete Records	15
2	Consignment Accounts	15
3	Branch Accounts	15
4	Fire Insurance Claim	15
	Total	60

Sr. No.	Modules / Units
1	Accounting from Incomplete Records
	Introduction Problems on preparation of final accounts of Proprietary Trading Concern (conversion method)
2	Consignment Accounts
	Accounting for consignment transactions Valuation of stock Invoicing of goods at higher price (excluding overriding commission, normal/abnormal losses)
3	Branch Accounts
	Meaning/ Classification of branch Accounting for Dependent Branch not maintaining full books: Debtors method Stock and debtors method
4	Fire Insurance Claim
	Computation of Loss of Stock by Fire Ascertainment of Claim as per the Insurance Policy Exclude: Loss of Profit and Consequential Loss

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

## 2. Commerce II

Sr. No.	Modules	No. of Lectures
1	Concept of Services	12
2	Retailing	12
3	Recent Trends in Service Sector	10
4	E-Commerce	11
	Total	45

Sr. No.	Modules / Units
1	Concept of Services
	Introduction: Meaning, Characteristics, Scope and Classification of Services — Importance of service sector in the Indian Marketing Mix Services: Consumer expectations, Services Mix, - Product, Place, Price, Promotion, Process of Services delivery, Physical evidence and people Service Strategies: Market research and Service development cycle, Managing demand and capacity, opportunities and challenges in service sector.
2	Retailing
	Introduction: Concept of organized and unorganized retailing, Trends in retailing, growth of organized retailing in India, Survival strategies for unorganized Retailers Retail Format: Store format, Non — Store format, Store Planning, design and layout Retail Scenario: Retail Scenario in India and Global context — Prospects and Challenges in India. Mall Management — Retail Franchising. FDI in Retailing, Careers in Retailing
3	Recent Trends in Service Sector
	ITES Sector: Concept and scope of BPO, KPO, LPO and ERP.  Banking and Insurance Sector: ATM, Debit & Credit Cards, Internet Banking —  Opening of Insurance sector for private players, FDI and its impact on Banking and Insurance Sector in India  Logistics: Net working —Importance —Challenges
4	E-Commerce
	Introduction: Meaning, Features, Functions and Scope of E-Commerce- Importance and Limitations of E-Commerce Types of E-Commerce: Basic ideas and Major activities of B2C, B2B, C2C. Present status of E-Commerce in India: Transition to E-Commerce in India, E- Transition Challenges for Indian Corporates; on-line Marketing Research.

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

## 3. Business Economics II

Sr. No.	Modules	No. of Lectures
1	Market structure: Perfect competition and Monopoly	10
2	Pricing and Output Decisions under Imperfect Competition	15
က	Pricing Practices	10
4	Evaluating Capital Projects	10
	Total	45

Sr. No.	Modules / Units
1	Market structure: Perfect competition and Monopoly
	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	Pricing and Output Decisions under Imperfect Competition
	Monopolistic competition: 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)  Oligopolistic markets: key attributes of oligopoly - Collusive and non collusive oligopoly market - Price rigidity - Cartels and price leadership models (with practical examples)
3	Pricing Practices
	Cost oriented pricing methods: 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	Evaluating Capital Projects
	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)

# Ability Enhancement Courses (AEC)

## 4. Business Communication II

### Modules at a Glance

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

#### 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	Presentation Skills
	Presentations: (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
2	Group Communication
	Interviews: Group Discussion Preparing for an Interview, Types of Interviews — Selection, Appraisal, Grievance, Exit Meetings: 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  Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele —Conferencing  Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR
3	Business Correspondence
	Trade Letters: Order, Credit and Status Enquiry, Collection (just a brief introduction to be given) Only following to be taught in detail:- 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.]
4	Language and Writing Skills
	Reports: Parts, Types, Feasibility Reports, Investigative Reports Summarisation: 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, Chetan Bhagat One Night At A Call Center, Chetan Bhagat My Three Mistakes, Arindam Choudhary: Count Your Chickens Before They Hatch, Stephen

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# Ability Enhancement Courses (AEC)

## 5. 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	60

Sr. No.	Modules / Units
1	Solid Waste Management for Sustainable Society
	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 Mumbai
2	Agriculture and Industrial Development
	Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, desertification - Uneven Food Production - Hunger, Malnutrition and Food Security - Sustainable Agricultural practices  Environmental Problems Associated with Industries - pollution - Global warming, Ozone Layer Depletion, Acid rain, - Sustainable Industrial practices - Green Business and Green Consumerism, Corporate Social Responsibility
3	Tourism and Environment
	Tourism: Meaning, Nature, Scope and importance —Typology of tourism-classification; Tourism potentials in India and challenges before India; New Tourism Policy of India; Consequences of tourism: Positive and Negative Impacts on Economy, Culture and environment- Ecotourism
4	Environmental Movements and Management
	Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghat and Save Jaitapur; Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon Credit.EIA - Environment Protection Acts — Concept and components of Geospatial Technology- Applications of GST in Environmental Management.
5	Map Filling
	Map filling of Konkan and Mumbai (Environmentally significant features and GST centers) using point, line and polygon segment.  Concept and Calculation of Environmental Performance Index (EPI)

# Skill Enhancement Courses (SEC)

## 6. Foundation Course - II

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No	Modules / Units	
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.	
2	Human Rights	
	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	
3	Ecology	
	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	
4	Understanding Stress and Conflict	
	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	
5	Managing Stress and Conflict in Contemporary Society	
	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)

## 6. Foundation Course in NSS - II

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No.	Modules / Units
1	Socio-economic Survey and Special Camp
	Socio-economic survey- its meaning and need, Process of Socio-economic survey- design of questionnaire; data collection, data analysis and report writing Special camping activity 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
2	Orientation of the College Unit and Communication Skills
	Training and orientation of the program unit in the college  Leadership training — formation of need based programmmes- Concept of campus to community(C to C) activities  Communication skills and Documentation  Communication skills- the concept, Verbal, Non-Verbal communication  The documentation- Activity Report Writing —basics of NSS accounting —Annual Report —Press note and preparation
3	Rapport with Community and Programme Planning
	Working with individual group and community  Ice breaking- interaction games —conflict resolution  Program planning  Programme planning- the concept and its features, requirements for successful implementation of program- program flow charting- feedback
4	Government Organisations / Non-Government Organisations
	Structure of Government Organisations and Non-Government Organisations 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) Government schemes for community development Schemes os Government welfare departments for community development- provisions & examples

## Skill Enhancement Courses (SEC)

## 6. Foundation Course in NCC - II

Sr. No.	Modules	No. of Lectures
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
	Total	45

Sr. No.	Modules / Units
1	Disaster Management, Social Awareness and Community Development
	Disaster Management: Desired outcome: The student shall gain basic information about civil defence organisation / NDMA & shall provide assistance to civil administration in various types of emergencies during natural / manmade disasters  • Civil Defence Organisation and Its Duties/ NDMA  • Types of Emergencies/ Natural Disaster  • Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake/ Accident etc.  • Avan 'model of NCC Social Awareness and Community Development:
	Desired outcome: 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.  • Basics of Social Service, Weaker Sections of Our Society and Their Needs  • Social/ Rural Development Project: MNREGA, SGSY, NSAP etc.  • Contribution of Youth towards Social Welfare  • Civic Responsibilities  • Causes & Prevention of HIV/AIDS; Role of Youth
2	Health and Hygiene
	Desired outcome: The student shall be fully aware about personal health and hygiene lead a healthy life style and foster habits of restraint and self awareness.  • Structure and Functioning of the Human Body  • Hygiene and Sanitation (Personal and Food Hygiene)  • Infectious & Contagious Diseases & Their Prevention
3	Drill with Arms
	Desired outcome: 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.  • Attention, Stand at Ease and Stand Easy  • Getting on Parade with Rifle and Dressing at the Order  • Dismissing and Falling Out  • Ground / Take Up Arms  • Present From the Order and Vice-versa  • General Salute, Salami Shastra
4	Weapon Training
	<ul> <li>Desired outcome: The student shall have basic knowledge of weapons and their use and handling.</li> <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> </ul>

	<ul> <li>Range procedure and safety precautions</li> <li>Short range firing, Aiming- II -Alteration of sight</li> </ul>		
	• Shortrange ming, Anning- II -Arteration of Signi		
Sr. No.	Modules / Units		
5	Specialized Subject: Army Or Navy Or Air		
	Army Desired outcome: The training shall instill patriotism, commitment and passion serve the nation motivating the youth to join the defence forces.  It will also acquaint, expose & provide basic knowledge about armed, naval and air-force subjects  A. Map reading Introduction to types of Maps and Conventional signs Scales and Grid system Topographical forms and technical terms Relief, contours and Gradients Cardinal points and Types of North Types of bearings and use of Service Protractor Prismatic compass and its use and GPS  B. Field Craft and Battle Craft Introduction Judging distance Description of ground Recognition, Description and Indication of landmarks and targets		
	OR  Navy  A. Naval Communication  Introduction to Naval Modern Communication, Purpose and Principles  Introduction of Naval communication  Duties of various communication sub-departments		
	<ul> <li>Semaphore         <ul> <li>Introduction of position of letters and prosigns</li> <li>Reading of messages</li> <li>Transmission of messages</li> </ul> </li> <li>B. Seamanship         <ul> <li>Anchor work</li> <li>Parts of Anchor and Cable, their identification</li> </ul> </li> <li>Rigging</li> </ul>		
	<ul> <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> <li>C. Boat work</li> <li>Parts of Boat and Parts of an Oar</li> <li>Instruction on boat Pulling- Pulling orders</li> </ul>		
	Steering of boat under oars, Practical instruction on Boat Pulling,		

Precautions while pulling	
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Sr. No.	Modules / Units
	OR
	Air  A. Air frames
	Flying/ Building of Aero models

## Skill Enhancement Courses (SEC)

# 6. Foundation Course in Physical Education - II

Sr. No.	Modules	No. of Lectures
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
	Total	60

Sr. No.	Modules / Units	
1	Development of Fitness	
	<ul> <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	Health, Fitness and Diseases	
	<ul> <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	Yoga Education	
	<ul> <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	Daily Schedule of Achieving Quality of Life and Wellness	
	<ul> <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>	

## Core Courses (CC)

# 7. Mathematical and Statistical Techniques II

### Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Functions, Derivatives and Their Applications	15
2	Interest and Annuity	15
3	Bivariate Linear Correlation and Regression	15
4	Time series and Index Numbers	15
5	Elementary Probability Distributions	15
	Total	75

#### 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	Functions, Derivatives and Their Applications
	Concept of real functions: Constant function, linear function, xn, ex, ax, log x.  Demand, Supply, Total Revenue, Average Revenue, Total cost, Average cost and Profit function. Equilibrium Point, Break-even point.  Derivative of functions:  § Derivative as rate measure, Derivative of xn, ex, ax, log x.  § Rules of derivatives: Scalar multiplication, sum, difference, product, quotient (Statements only), Simple problems. Second order derivatives.  § Applications: Marginal Cost, Marginal Revenue, Elasticity of Demand. Maxima and Minima for functions in Economics and Commerce.  (Examination Questions on this unit should be application oriented only.)
2	Interest and Annuity
	Interest: Simple Interest, Compound Interest (Nominal & Effective Rate of Interest), Calculations involving upto 4 time periods.  Annuity: Annuity Immediate and its Present value, Future value. Equated Monthly Installments (EMI) using reducing balance method & amortization of Ioans. Stated Annual Rate & Affective Annual Rate Perpetuity and its present value. Simple problems involving up to 4 time periods.
3	Bivariate Linear Correlation and Regression
	Correlation Analysis: Meaning, Types of Correlation, Determination of Correlation: Scatter diagram, Karl Pearson's method of Correlation Coefficient (excluding Bivariate Frequency Distribution Table) and Spearman's Rank Correlation Coefficient.  Regression Analysis: Meaning, Concept of Regression equations, Slope of the Regression Line and its interpretation. Regression Coefficients (excluding Bivariate Frequency Distribution Table), Relationship between Coefficient of Correlation and Regression Coefficients, Finding the equations of Regression lines by method of Least Squares.
4	Time series and Index Numbers
	Time series: Concepts and components of a time series. Representation of trend by Freehand Curve Method, Estimation of Trend using Moving Average Method and Least Squares Method (Linear Trend only ). Estimation of Seasonal Component using Simple Arithmetic Mean for Additive Model only (For Trend free data only). Concept of Forecasting using Least Squares Method. Index Numbers: Concept and usage of Index numbers, Types of Index numbers, Aggregate and Relative Index Numbers, Lasperye s, Paasche s, Dorbisch-Bowley s, Marshall-Edgeworth and Fisher s ideal index numbers, Test of Consistency: Time Reversal Test and Factor Reversal Test. Chain Base Index Nos. Shifting of Base year. Cost of Living Index Numbers, Concept of Real Income, Concept of Wholesale

	Price Index Number. (Examples on missing values should not be taken)						
5	Elementary Probability Distributions						
	Probability Distributions:  § Discrete Probability Distribution: Binomial, Poisson (Properties and applications only, no derivations are expected)  § Continuous Probability distribution: Normal Distribution. (Properties and applications only, no derivations are expected)						

#### Tutorial:

Two tutorials to be conducted on each unit i.e. 10 tutorials per semester. At the end of each semester one Tutorial assignment of 10 marks should be given.

### Reference Books

#### Reference Books

#### Accountancy and Financial Management

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

#### Commerce

- Business Organisation Management Maheshwari, Rajendra P, Mahajan, J.P., International Book House
- Business Organisation, Maheshwari, Rajendra P, Mahajan, J.P., International Book House
- Introduction To Commerce, Vikram, Amit, Atlantic Pub
- A Course Book On Business Environment, Cherunilam, Francis, Himalaya Pub
- Business Environment, Cherunilam, Francis, Himalaya Pub
- Essentials Of Business Environment, Aswathappa,K., Himalaya Pub
- Essentials Of Business Environment, Aswathappa, Himalaya Pub
- Strategic Management, Kapoor, Veekkas, Taxmann
- Strategic Management, David, Fred R., Phi Leraning
- Strategic Management, Bhutani, Kapil, Mark Pub.
- Strategic Management, Bhutani, Kapil, Mark Pub.
- Entrepreneurship, Hisrich, Robert D, Mc Graw Hill
- Entrepreneurship Development, Sharma, K.C., Reegal Book Depot
- Service Marketing, Temani, V.K., Prism Pub
- Service Marketing, Temani, V.K., Prism Pub
- Management Of Service Sector, Bhatia, B S, V P Pub
- Introduction To E Commerce, Dhawan, Nidhi, International Book House
- Introduction To Retailing, Lusch, Robert F., Dunne, Patrick M., Carver, James R., Cengage Learning
- Retailing Management, Levy Michael., Weitz Barton A, Tata Mcgraw Hill

#### **Business Economics**

- Mehta, P.L.: Managerial Economics —Analysis, Problem and Cases (S. Chand & Sons, N. Delhi, 2000)
- Hirchey .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, Anju D(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)Organisational Behaviour, 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 Bhargava 91971) Company Notices, Meetings and Regulations
- Black, Sam (1972) Practical Public Relations, E.L.B.S. London.
- Bovee Courtland, L and Thrill, John V(1989) Business Communication, Today McGraw Hill, New York, Taxman Publication.
- Burton, G and Thakur, (1995) Management Today- Principles and Practices. T.M.H., New Delhi.
- Darrow, Richard, Forrstal, Dan and Coolman, Aubrey (1967) Public Relations Handbook, The Dartwell Co., Chicago.
- Dayal, Ishwar(9810) Managing Large Organizations: A Comparative Study.
- Drucher, P.F. ((1970) Technology, Management and Society, Pan Books London.
- Drucher, P.F. ((1974) Management Responsibilities Practices, Heinemann, London. 22. Eyre, E.C. (1985) Effective Communication Made Simple, Rupa and Co. Calcutta.
- Ecouse Barry, (1999), Competitive Communication: A Rhetoric for Modern Business, OUP.
- Fisher Dalmar, (1999), Communication in Organisation, Jaico Pub House, Mumbai, Delhi.
- Frailley, L.E. (1982) Handbook of Business Letters, Revised Edn. Prentice Hall Inc.
- French, Astrid (1993) Interpersonal Skills. Sterling Publishers, New delhi.
- 27 Fritzsche, David J (2005) Business Ethics: A Global and Managerial Perspective McGraw Hill
- Garlside, L.E. (1980) Modern Business Correspondence, McDonald and Evans Ltd. Plymouth.
- Ghanekar, A(1996) Communication Skills for Effective Management. Everest Publishing House, Pune.
- Graves, Harold F. (1965) Report Writing, Prentice Hall, New Jersey.
- Gupta, Anand Das (2010) Ethics, Business and Society: Managing Responsibly Response Books 32.Gupta, Dipankar (2006) Ethics Incorporated: Top Priority and Bottom Line Response Books
- Krevolin, Nathan (1983) Communication Systems and Procedures for Modern Office, Prentice Hall, New Jersey.
- Lesikar, Raymond V and Petit, John D.(1994) Business Communication: Theory and Application, Richard D. Irwin Inc. Ilinois.

- Ludlow, Ron. (1995) The Essence of Effective Communication, Prentice, New Delhi.
- 36.M. Ashraf, Rizvi (2006) Effective Technical Communication Tata McGraw Hill
- Martson, John E. 1963) The Nature of Public Relations, McGraw Hill, New Delhi.
- Majumdar, P.K. (1992) Commentary on the Consumer protection Act, Prentice, New Delhi.
- McQuail, Denis (1975), Communication, Longman.
- Merrihue, William (1960) Managing by Communication, McGraw Hill, New York. 41. Mishra Rajiv K (2006) Code of Conduct for Managers Rupa Company
- Monippalli, M.M. (1997), The Craft of Business Letter Writing, T.M.H. New Delhi.
- Montagu, A and Matson, Floyd(1979) The Human Connection, McGraw Hill, New York.
- Murphy, Herta and Hilde Brandt, Herbert W (1984) Effective Business Communication, McGraw Hill, New York.
- Parry, John (1968) The Psychology of Human Communication.
- Parson, C.J. and Hughes (1970) Written Communication for Business Students, Great Britain.
- Peterson, Robert A and Ferrell, O.C (2005) Business Ethics: New Challenges for Business Schools and Corporate Leaders Prentice Hall of India Pvt., Ltd
- Phillip, Louis V. (1975) Organisational Communication- The Effective Management, Columbus Grid Inc. 49.. Ross, Robert D. (1977) The Management of Public Relations, John Wiley and Sons, U.S.A.
- Sadri Sorab, Sinha Arun and Bonnerjee peter (1998) Business Ethics: Concepts and Cases Tata McGraw Hill Public Company Limited
- Shekhar, R.C (1997) Ethical Choices in Business Response Books
- Stephenson, James (1988) Principles and Practice of Commercial Correspondence, Pilman and Sons Ltd. London.
- 53.. Shurter, Robert L. (1971) Written Communication in Business, McGraw Hill, Tokyo

#### **Environmental Studies**

- Singh, Savindra, 2011: Environmental Geography, Prayag Pustak Bhavan, Allahabad, India
- Gautam Alka, 2009: Environmental Geography, Sharda Pustak Bhavan, Allahabad, India
- Odum E.P. (1971): Fundamentals of Ecology, W.B. Saunders, Philadelphia
- Botkin D.B. & Keller E.A., 1995 : Environmental Science, John Wiley & Sons, New York
- McKinney M.L. & Schoch R.M., 1998 : Environmental Science, Jones & Bartlett Publishers, London
- Allaby M. 2002 : Basics of Environmental Sciences, Routledge, London
- Detwyler T.R., 1971: Man's Impact on Environment, McGraw Hill, New York
- Rao K.L. 1975 : India 's Water Wealth, Orient Longman Ltd. New Delhi
- Ahirrao W.R. & others, Paryavaran Vijnan (Marathi), Nirali Prakashan, Pune

#### **Foundation Course**

- Social and Economic Problems in India, Naseem Azad, R Gupta Pub (2011)
- Indian Society and Culture, Vinita Padey, Rawat Pub (2016)
- Social Problems in India, Ram Ahuja, Rawat Pub (2014)
- Faces of Feminine in Ancient, medivial and Modern India, Mandakranta Bose Oxford University Press
- National Humana rights commission- disability Manual
- Rural, Urban Migration: Trends, challenges & Strategies, S Rajagopalan, ICFAI-2012
- Regional Inequilities in India Bhat L SSSRD- New Delhi
- Urbanisation in India: Challenges, Opportunities & the way forward, I J Ahluwalia, Ravi Kanbur, P K Mohanty, SAGE Pub (2014)
- The Constitution of India, P M Bakshi 2011
- The Problems of Linguistic States in India, Krishna Kodesia Sterling Pub
- Politics in India: structure, Process and Policy Subrata Mitra, Rouutlege Pub
- Politics in India, Rajani Kothari, Orient Blackswan
- Problems of Communilism in India, Ravindra Kumar Mittal Pub
- Combating communalism in India: Key to National Integration, Kawal Kishor Bhardwaj, Mittal Pub

#### Foundation Course in NSS

- National Service Scheme Manual (Revised) 2006, Government of India, Ministry of Youth Affairs and Sports, New Delhi.
- University of Mumbai National Service Scheme Manual 2009.
- Avhan Chancellor's Brigade NSS Wing, Training camp on Disaster Preparedness Guidelines, March 2012
- Rashtriya Seva Yojana Sankalpana Prof. Dr. Sankay Chakane, Dr. Pramod\Pabrekar, Diamond Publication, Pune
- National Service Scheme Manual for NSS District Coordinators, National Service Scheme Cell, Dept. of Higher and Technical Education, Mantralaya,
- Annual report of National Service Scheme (NSS) published by Dept. of Higher and Technical Education, Mantralaya,
- NSS Cell, Dept. of Higher and Technical Education, Mantralaya, UTKARSHA- Socio and cultural guidelines
- Case material as a Training Aid for Field Workers, Gurmeet Hans.
- Social service opportunities in hospitals, Kapil K. Krishnan, TISS
- New Trends in NSS, Research papers published by University of Pune
- ANOOGUNJ Research Journal, published by NSS Unit C. K. Thakur college
- Training Manual for Field Work published by RGNIYD, Chreeperumbudur
- Prof. Ghatole R.N. Rural Social Science and Community Development.
- Purushottam Sheth, Dr. Shailaja Mane, National Service Scheme
- Joint programme of National Service Scheme, University of Mumbai & DISHA DEEPSHIKHA Projects, Nair Hospital, 2011-12
- National Service Scheme in India: A Case study of Karnataka, M. B. Dishad, Trust Publications, 2001
- http://www.thebetterindia.com/140/national-service-scheme-nss/
- http://en.wikipedia.org/wiki/national-service-scheme 19=http://nss.nic.in/adminstruct
- http://nss.nic.in/propexpan
- http://nss.nic. in
- http://socialworknss.org/about.html

#### Foundation Course in NCC

- Cadet's Hand book —Common subject..all wings, BY DG NCC, New Delhi.
- Cadet's Hand book —Specialised Subjects, Army, Navy, Air-force, BY DG NCC, New Delhi.
- NCC OTA Precise, BY DG NCC, New Delhi.
- "AVAN" Model of Disaster Mang., Vinayak Dalvie, Proceedings of Int. Conf. on Urban Plan. and Env Strat & Challenges, Elphinstone College, Jan 2007.
- Humanistic Tradition of India, N.L. Gupta, Mohit Publication, New Delhi
- Social psychology, Baron & Byrne, Pearson Publication, 12<sup>th</sup> Edition self awareness know yourself / insight (110) Group & Individuals (374) Group discussion
- Chanakya's 7 Secrets of Leadership, Radhakrishanan Pillai and D.Shivnandhan, Jaico
- Social Psychology: Understanding Human Interaction, Baron, Robert A., (302/BAR/BYR), 7th Edition
- Seven Habits of Highly Effective People., Covey, Stephen
- The Habit of Winning., Iyer , Prakash, Penguin , India ; 2011
- The Goal, Goldratt , Eliyahu, The Northriver press ; 1994
- Freedom Struggle, Chandra Bipin, National Book Trust 1972
- Freedom of Religion and The Indian Judiciary, Bachal V.M., Shubhada Saraswat, (362P)
- India 1996- A Reference Annual Govt. of India
- Saha Soneri Pane, Vinayak D. Savarkar
- Environmental Biology and Toxicology, P.D. Sharma., Rastogi Publication
- Environmental Science, S.C. Santra, New Central Book Agency

- National Cadet Corps (India), Lambert M. Surhone, Mariam T. Tennoe, Susan F. Henssonow, Betascript Publishing, 2011
- National Cadet Corps, Youth in Action (Google eBook), National Cadet Corps (India), Lancer Publishers, 2003
- Youth in Step: History of the National Cadet Corps, V. Longer, Lancer international, 1983 Original from the University of Michigan
- National Cadet Corps of India, Man Mohan Sharma, Vision Books, 1980 Original from the University of Michigan
- The National Cadet Corps Act, 1948, as Modify Up to the 1st July 1963, India, Government of India Press, 1963 (Military Law)
- Cadet Corps in India: Its Evolution and Impact, Satis Chandra Maikap, Darbari Udyog, 1979 Original from the University of California
- National Cadet Corps: 100 Years of Distinction, National Cadet Corps (Singapore), NCC
- The NCC, Singapore, National Cadet Corps Council, National Cadet Corps Council
- Grooming Tomorrow's Leaders: National Cadet Corps, 1917-2006, R.S. Chhettri, Lancer Publishers, 2006
- National Civil Defence Cadet Corps, Lambert M. Surhone, Mariam T. Tennoe, Susan F. Henssonow, Betascript Publishing, 2011
- Discovery of India, Jawaharlal Nehru
- Health and Hygiene, Manoj. J.S., Agra University Publication
- Yoga for Healing, Venkateswaran P.S., Bombay:- Jaico Publishing House 1989
- Yoga Illustrated, New Delhi, Ministry of Information and Broadcasting, 1995
- Yoga Practice, 1972, Shivnande Swami, Mumbai:- D.B. Taraporewala 1972
- Yoga of Patanjali-1979, Yardi M.R., Bhandarkar Oriental Research Institute- 1974
- Sustainable Development (An Alternative Paradigm), Satpathy , N., Karnavati Publications , Ahmedabad
- Global Partners for Sustainable Development, Pachauri R.K & Srivastava L., Tata Energy Research Institute, New Delhi; 1994, 1998
- Ecology and the Politics of survival : Conflict over Natural Resources in India, Shiva , Vandana, Sage Publications , California , 1991

#### Foundation Course in Physical Education

- Lippian Cott Williams and Wilkins 2006.
- American College of Sports Medicine, ACSM 's, Guidelines for Exercise Testing and Priscription. (2013) Ninth Edition, Lippian Cott Williams and Wilkins.
- American College of Sports Medicine, ACSM's Resource Manual for Guidelines for Exercise Testing and Priscription. (2006) 5th Ed., Lippian Cott Williams and Wilkins, 2006.
- Beashel, P., & Taylor, J. (1996). Advance Studies in Physical Education and Sports. U.K.: Thomas Nelson and Sons Ltd.
- Bucher, C.A. (1995). Foundation of Physical Education (12th Ed.) USA: St. Louis,
- C.V. Mosloy.
- Colfter, G.R., Hamilton, K.E., Magill R.A., & Hamilton B.J. (1986). Contemporary Physical Education. USA: Wim C. Brown Publisher.
- Daryl S. (1994). Introduction to physical education, fitness and sports (2nd ed.). London: Mayfield publishing company.
- Dheer, S.D.(1991). Introduction to Health Education. New Delhi: Friends Publication.
- Dr. A.K. Uppal& Dr. G. P. Gautam (2004). Physical education and Health. Delhi: Friends publisher.
- Dr. Gharote M. L; Teaching Methods for Yogic Practices. —2nd Ed., Kaivalyadham Samiti, Lonavala- 2001.
- Dr. Gharote M. L; Guideline for Yogic Practices —2nd Ed., The Lonavala Yoga Institute (India), Lonavala-2007

- Halfield, F.C. (2001). Fitness: The Complete Guide. USA: International Sports Science Association.
- Jackson, A.L., Morrow, J.R. (2004). Physical activity for health & fitness. IL:Human kinetics.
- Kamlesh, M.L. (2002). Foundation of Physical Education. New Delhi : Metropolitan Book & Co. Ptd. Ltd.
- Kansal, D.K. (2012). A Text book of Applied Measurement Evaluation and Sports Selection (3rd Ed.). New Delhi: DVS Publication.
- Lock Hurt and others —Anatomy of the human body, Feber & Feber Oxford University, 1975
- Muller, J. P.(2000). Health, Exercise and Fitness. Delhi: Sports.
- Murgesh N. —Anatomy, Physiology and Health Education, Sathya, Chinnalapatti, 1990.
- NASPE. (2005). Physical Education for lifelong fitness. The physical Best teacher's guide. IL: Human Kinetics
- Nieman, D.C.(1986). Fitness and Sports Medicine: Health Related Approach London: Mayfield Publishing Co.
- Nimbalkar. Sadashiv, Yoga for Health and Peace.- 6th Ed., Yoga Vidya Niketan, Mumbai., 2004.
- Pate R.R. & Hohn R.C. (1994). Health Fitness Through Physical Education. USA: Human Kinetics.
- Pandey ,& Gangopadhyay.(1995). Health Education for school children. New Delhi: Friends Publication.
- Safrit, M. (1990). Introduction to Measurement in Physical Education and Exercise Science. St. Louis, Toronto, Bastan: Times Mirror/Mosby College Publishing.
- Sharma, O.P. (1998). History of Physical Education. Delhi: Khel Sahitya Kendra.Werner. W.K., Hoeger. (2007). Fitness and Wellness. (8th ed.). Wadsworth, Cengage Learning.

#### Mathematical and Statistical Techniques

- Mathematics for Economics and Finance Methods and Modelling by Martin Anthony and Norman Biggs, Cambridge University Press, Cambridge Iow priced edition, 2000, Chapters 1, 2, 4, 6 to 9 & 10.
- Applied Calculus: By Stephen Waner and Steven Constenoble, Brooks/Cole Thomson Learning, second edition, Chapter 1 to 5.
- Business Mathematics By D. C. Sancheti and V. K. Kapoor, Sultan Chand & Sons, 2006, Chapter 1, 5, 7, 9 & 10.
- 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.
- Quantitative Methods Part I By S. Saha and S. Mukerji, New Central Book Agency, 1996, Chapters 7 & 12.
- Mathematical Basis of Life Insurance By S.P. Dixit, C.S. Modi and R.V. Joshi, Insurance Institute of India, Chapters 2: units 2.6, 2.9, 2.20 & 2.21.
- Securities Laws & Regulation of Financial Market: Intermediate Course Paper 8, Institute of Company Secretaries of India, Chapter 11.
- Investments By J.C. Francis & R.W. Taylor, Schaum's Outlines, Tata Mc Graw Hill Edition 2000, Chapters 2,4 & section 25.1.
- Indian Mutual Funds Handbook: By Sundar Shankaran, Vision Books, 2006, Sections 1.7,1.8.1, 6.5 & Annexures 1.1to 1.3.
- STATISTICS by Schaum Series.
- Operations Research by Gupta and Kapoor
- Operations Research by Schaum Series
- Fundamentals of Statistics D. N. Elhance.
- Statistical Methods S.G. Gupta (S. Chand & Co.
- Statistics for Management Lovin R. Rubin D.S. (Prentice Hall of India)
- Statistics Theory, Method & Applications D.S. Sancheti & V. K. Kapoor.
- Modern Business Statistics (Revised) B. Pearles & C. Sullivan —Prentice Hall of India.
- Business Mathematics & Statistics: B Aggarwal, Ane Book Pvt. Limited
- Business Mathematics: D C Sancheti & V K Kapoor, Sultan Chand & Sons
- Business Mathematics: A P Verma, Asian Books Pvt. :Limited.

# Question Paper Pattern (Practical Courses)

Maximum Marks: 100

Questions to be set: 06

Duration: 03 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question	Particular	Marks
No		
Q-1	Objective Questions	20 Marks
	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)	
Q-2	Full Length Practical Question	15 Marks
	OR	
Q-2	Full Length Practical Question	15 Marks
Q-3	Full Length Practical Question	15 Marks
	OR	
Q-3	Full Length Practical Question	15 Marks
Q-4	Full Length Practical Question	15 Marks
	OR	
Q-4	Full Length Practical Question	15 Marks
Q-5	Full Length Practical Question	15 Marks
	OR	
Q-5	Full Length Practical Question	15 Marks
Q-6	A) Theory questions	10 Marks
	B) Theory questions	10 Marks
	OR	
Q-6	Short Notes	20 Marks
	To be asked 06	
	To be answered 04	

#### Note:

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

# Question Paper Pattern (Theoretical Courses)

Maximum Marks: 100

Questions to be set: 06

Duration: 03 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question No	Particular	Marks
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  OR	15 Marks
Q-2	Full Length Question	15 Marks
Q-3	Full Length Question  OR	15 Marks
Q-3	Full Length Question	15 Marks
Q-4	Full Length Question  OR	15 Marks
Q-4	Full Length Question	15 Marks
Q-5	Full Length Question  OR	15 Marks
Q-5	Full Length Question	15 Marks
Q-6	A) Theory questions B) Theory questions OR	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 10/5 Marks.