



# **BANGALORE UNIVERSITY**

*B.Com. INSURANCE & ACTUARIAL STUDIES (CBCS) DEGREE  
SEMESTER SCHEME SYLLABUS 2017 – 2018*

**DEPARTMENT OF COMMERCE**

*Central College Campus, Bengaluru – 560 001.*

**REGULATIONS PERTAINING TO B.Com INSURANCE & ACTUARIAL STUDIES (CBCS)**  
**DEGREE SEMESTER SCHEME 2017 - 18**

**I. OBJECTIVES :**

1. To cater to the manpower needs of companies in Accounting, Taxation, Auditing, Financial analysis and Management.
2. To develop business analysts for companies, capital markets and commodity markets.
3. To prepare students to take up higher education to become business scientists, researchers consultants and teachers, with core competencies.
4. To develop human resources to act as think tank for Business Development related issues.
5. To develop entrepreneurs.
6. To develop business philosophers with a focus on social responsibility and ecological sustainability.
7. To develop IT enabled global middle level managers for solving real life business problems and addressing business development issues with a passion for quality competency and holistic approach.
8. To develop ethical managers with interdisciplinary approach.
9. To prepare students for professions in the field of Accountancy - Chartered Accountancy, Cost and Management Accountancy, Company Secretary, Professions in Capital and Commodity Markets, Professions in life and non life insurance and professions in Banks by passing the respective examinations of the respective professional bodies.
10. Also to develop the students for competitive examinations of UPSC, KPSC, BSRB, Staff Selection Commission, etc.

**II. ELIGIBILITY FOR ADMISSION :**

Candidates who have completed Two year Pre – University course of Karnataka State or its equivalent with Business Studies and Accountancy as two major subjects of study in both first and second year pre-university are eligible for admission into this course.

**III. DURATION OF THE COURSE:**

The course of study is four (04) years of Eight Semesters. A candidate shall complete his/her degree within eight (08) academic years from the date of his/her admission to the first semester. However, students successfully complete Two (02) years of the course and leave the course, will be awarded Diploma in Commerce. Students successfully completes Three (03) years of the course will be awarded Bachelors Degree in Commerce (B.Com.). An option is provided to the students to continue the course to the Fourth year and those who successfully complete the Fourth year will be awarded Bachelors Degree in Commerce (Hon.) {B.Com, (Insurance & Actuarial Studies)}.

**IV. MEDIUM OF INSTRUCTION**

The medium of instruction shall be English. However, a candidate will be permitted to write the examination either in English or in Kannada.

**V. CLASS ROOM STRENGTH OF STUDENTS**

There shall be Maximum of 60 students in each section.

## **VI. ATTENDANCE:**

- a. For the purpose of calculating attendance, each semester shall be taken as a Unit.
- b. A student shall be considered to have satisfied the requirement of attendance for the semester, if he/she has attended not less than 75% in aggregate of the number of working periods in each of the subjects compulsorily.
- c. A student who fails to complete the course in the manner stated above shall not be permitted to take the University examination.

## **VII. COURSE MATRIX**

- (i) Annexure – 1 for B.Com Course Matrix
- (ii) B.Com (Vocational) and BA (Restructured), the changes made in 2012-13 is retained

## **VIII. TEACHING AND EVALUATION:**

M.Com/MBA/MFA/MBS graduates with B.Com, B.B.M, BBA& BBS as basic degree from a recognized university are only eligible to teach and to evaluate the subjects (excepting languages, compulsory additional subjects and core Information Technology related subjects) mentioned in this regulation. Languages and additional subjects shall be taught by the graduates as recognized by the respective board of studies.

## **VIII.SKILL DEVELOPMENT / RECORD MAINTENANCE AND SUBMISSION:**

- a. Every college is required to establish a dedicated business lab for the purpose of conducting practical/on line assignments to be written in the record.
- b. In every semester, the student should maintain a Record Book in which a minimum of 5 exercises/programs per subject are to be recorded. This Record has to be submitted to the Faculty for evaluation at least 15 days before the end of each semester.

## **IX. SCHEME OF EXAMINATION:**

- a. There shall be a university examination at the end of each semester. The maximum marks for the university examination in each paper shall be 70.
- b. Of the 30 marks of Internal Assessment, 20 marks shall be based on Two tests. Each test shall be of at least 01 hour duration to be held during the semester. The average of two tests shall be taken as the internal assessment marks. The remaining 10 marks of the Internal Assessment shall be based on Attendance and Skill Development Record of 05 marks each.
- c. The marks based on attendance shall be awarded as given below:

75% to 80%	= 02 marks.
81% to 85%	= 03 marks.
86% to 90%	= 04 marks.
91% to 100%	= 05 marks.
- d. Marks for skill development shall be awarded by the faculty concerned based on Skill Development exercises provided in the syllabus of each paper. The student is required to prepare/workout the concerned exercises in a Record Book maintained by him/her and shall submit it the faculty concerned at least 15 days before the last date of the semester.

## **X. APPEARANCE FOR THE EXAMINATION:**

- a) A candidate shall apply for all the parts in each examination when he/she appears for the first time. A candidate shall be considered to have appeared for the examination only if he/she has

submitted the prescribed application for the examination along with the required fees to the university.

- b) A candidate who has passed any language under Part-I shall be eligible to claim exemption from the study of the language if he/she has studied and passed the language at the corresponding level.
- c) Further, candidates shall also be eligible to claim exemption from studying and passing in those commerce subjects which he/she has studied and passed at the corresponding level, subject to the conditions stipulated by the university.
- d) A candidate who is permitted to seek admission to this degree course on transfer from any other University shall have to study and pass the subjects which are prescribed by the University. Such candidates shall not however, be eligible for the award of ranks.

#### **XI. MINIMUM FOR A PASS:**

Candidates who have obtained a minimum of 35% marks in university examination (i.e. 25 marks out of 70 marks of theory examination) and 40% in aggregate (i.e., total of university examination and internal assessment marks) in each subject shall be eligible for a pass or exemption in that subject.

#### **XII. CLASSIFICATION OF SUCCESSFUL CANDIDATES:**

1. The results of the First to Sixth semester degree examination shall be declared and classified separately as follows:
  - a. First Class: Those who obtain 60% and above of the total marks of parts I, II and III.
  - b. Second Class: Those who obtain 50% and above but less than 60% of total marks of parts I, II and III.
  - c. Pass Class: Rest of the successful candidates who secure 40% and above but less than 50% of marks in part I, II and III.
2. Class shall be declared on the basis of the aggregate marks obtained by the candidates in this degree course (excluding languages (part I) and non-core subjects (Part III)) as a whole. However, only those candidates who have passes each semester university examination in the first attempt only shall be eligible for award of ranks. The first ten ranks only shall be notified.

#### **XIII. MEDALS AND PRIZES:**

No candidates passing an external examination shall be eligible for any scholarship, fellowship, medal, prize or any other award.

#### **XIV. TERMS AND CONDITIONS:**

- a) A candidate is allowed to carry all the previous un-cleared papers to the subsequent semester/semesters.
- b) Such of those candidates who have failed/remained absent for one or more papers henceforth called as repeaters, shall appear for exam in such paper/s during the three immediately succeeding examinations. There shall be no repetition for internal assessment test.
- c) The candidate shall take the examination as per the syllabus and the scheme of examination in force during the subsequent appearances.

#### **XV. PATTERN OF QUESTION PAPER:**

Each theory question paper shall carry 70 marks and the duration of examination is 3 hours. The

Question paper shall ordinarily consist of three sections, to develop testing of conceptual skills, understanding skills, comprehension skills, articulation and application of skills. The question paper setter shall be asked to prepare TWO sets of papers with a maximum of 10% repetition. The Question Paper will be as per the following Model:

<b>SECTION-A</b> 1. a,b,c,d,e,f,g,	(Conceptual questions) Answer any Five	(05 X 02 = 10 Marks)
<b>SECTION -B:</b> 2,3,4,5,6.	(Analytical questions) Answer any Three	(03 X 06 = 18 Marks)
<b>SECTION-C:</b> 7,8,9,10,11.	(Essay type questions) Answer any THREE	(03 X 14 = 42 Marks)
<b>Total</b>		<b>70 Marks</b>

#### **XVI. PROVISION FOR IMPROVEMENT OF RESULTS:**

The candidate shall be permitted to improve the results of the whole examination or of any Semester or a subject within the prescribed time by the university after the publication of the results. This provision shall be exercised only once during the course and the provision once exercised shall not be revoked. The application for improvement of results shall be submitted to the Registrar (Evaluation) along with the prescribed fee.

#### **XVII. REMOVAL OF DIFFICULTY AT THE COMMENCEMENT OF THESE REGULATIONS:**

If any difficulty arises while giving effect to the provision of these Regulations, the Vice Chancellor may in extraordinary circumstances, pass such orders as he may deem fit.

**BANGALORE UNIVERSITY**  
**B.COM INSURANCE AND ACTUARIAL STUDIES (CBCS) SEMESTER SCHEME 2017 – 18**  
**COURSE MATRIX**

**I SEMESTER**

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 1 Languages	Language - I: Kannada/Sanskrit/Urdu/Tamil/ Telugu/Malayalam/Additional English / Marathi/ Hindi	1.1	4	3	20	80	100	2
	Language – II : English	1.2	4	3	20	80	100	2
Part 2 Optional	Financial Accounting	1.3	4	3	30	70	100	2
	Indian Financial System	1.4	4	3	30	70	100	2
	Marketing and Services Management	1.5	4	3	30	70	100	2
	Introduction to Actuarial Science and Management	1.6	4	3	30	70	100	2
Part 3	Foundation Course*		3	3	20	80	100	2
	CC & EC*				50		50	1
<b>Total Credits</b>								<b>15</b>

**II SEMESTER**

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 1 Languages	Language - I: Kannada/Sanskrit/Urdu/Tamil/ Telugu/Malayalam/Additional English / Marathi/ Hindi	2.1	4	3	20	80	100	2
	Language – II : English	2.2	4	3	20	80	100	2
Part 2 Optional	Advanced Financial Accounting	2.3	4	3	30	70	100	2
	Retail Management	2.4	4	3	30	70	100	2
	Banking Law and Operations	2.5	4	3	30	70	100	2
	Fundamentals of Mathematics and Statistics.	2.6	4	3	30	70	100	2
Part 3	Foundation Course*		3	3	20	80	100	2
	CC & EC*				50		50	1
<b>Total Credits</b>								<b>15</b>

### III SEMESTER

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 1 Language	Language: I Kannada/Sanskrit/Urdu/Tamil/ Telugu/Malayalam/Additional English / Marathi/ Hindi	3.1	4	3	30	70	100	2
	Language – II:English	3.2	3	3	30	70	100	2
Part 2 Optional	Corporate Accounting	3.3	4	3	30	70	100	2
	Financial Management	3.4	4	3	30	70	100	2
	Business Ethics	3.5	4	3	30	70	100	2
	Finance & Financial Mathematics	3.6	4	3	30	70	100	2
	Public Relations and Corporate Communication	3.7	3	3	30	70	100	2
Part 3	Foundation Course*		3	3	30	70	100	2
	CC & EC*				50		50	1
<b>Total Credits</b>								<b>17</b>

### IV SEMESTER

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 1 Language	Language - I: Kannada/Sanskrit/Urdu/Tamil/ Telugu/Malayalam/Additional English / Marathi/ Hindi	4.1	4	3	30	70	100	2
	Language – II: English	4.2	3	3	30	70	100	2
Part 2 Optional	Advanced Corporate Accounting	4.3	4	3	30	70	100	2
	Cost Accounting	4.4	4	3	30	70	100	2
	E-Business and Accounting	4.5	4	3	30	70	100	2
	Stock and Commodity Markets	4.6	4	3	30	70	100	2
	Principles of Event Management	4.7	3	3	30	70	100	2
Part 3	Foundation Course*		3	3	30	70	100	2
	CC & EC*				50		50	1
<b>Total Credits</b>								<b>17</b>

**V SEMESTER**

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 2 Optional	Entrepreneurship Development	5.1	4	3	30	70	100	3
	International Financial Reporting Standards	5.2	4	3	30	70	100	3
	Income Tax – I	5.3	4	3	30	70	100	3
	Costing Methods	5.4	4	3	30	70	100	3
	Elective – I	5.5	4	3	30	70	100	3
	Elective – II	5.6	4	3	30	70	100	3
Part 3	SDC		3	3	30	70	100	2
<b>Total Credits</b>								<b>20</b>

**VI SEMESTER**

	Subjects	Paper	Instruction hrs/week	Duration of Exam(hrs)	Marks			Credits
					IA	Exam	Total	
Part 2 Optional	Business Regulations	6.1	4	3	30	70	100	3
	Principles and Practice of Auditing	6.2	4	3	30	70	100	3
	Income Tax – II	6.3	4	3	30	70	100	3
	Management Accounting	6.4	4	3	30	70	100	3
	Elective – I	6.5	4	3	30	70	100	3
	Elective – II	6.6	4	3	30	70	100	3
Part 3	SDC		3	3	30	70	100	2
<b>Total Credits</b>								<b>20</b>

**ELECTIVE GROUPS****1. FINANCE & ACTUARIAL STUDIES**

Semester No.	Paper No.	Title of the Paper
<b>V</b>	5.5	Statistics & Models
	5.6	Long Term Actuarial Mathematics
<b>VI</b>	6.5	Short Term A Actuarial Mathematics
	6.6	Models & Audit Trails



## **1. Foundation, Skill Development or Interdisciplinary Courses (Foundation Course\*)**

(Common for all programmes):

- Constitution of Indian and Human Rights
- Environment and Public Health
- Computer Applications and Information Technology
- Business Entrepreneurship and Management
- Philosophy, Psychology and Life Skills
- Personality Development and Leadership / Integrating Mind, Body and Heart
- Indian History, Culture and Diversity
- Research Methodology
- Education and Literacy / Science and Life
- Human Resource Development .Management
- One of the Foreign Languages such as German, French etc.
- Any other Course prescribed by the University from time to time
- Commodity & Stock Market
- Mathematics in finance.

## **2. Co-and Extra – Curricular Activities (CC& EC\*)**

A student shall opt for any one of the following activities in the first four semesters offered in the college

- N.S.S / N.C.C./Rotary Activities / Rovers and Rangers
- Sports and Games / Activities related to Yoga
- A Small project work concerning the achievements of Indian in different fields
- Evolution of study groups/seminar circles on Indian thoughts and ideas
- Interaction with local communities in their neighborhood and learn about and from them
- Exploring different aspects of Indian civilizations
- Other activities such as Cultural Activities as prescribed by the University.

Evaluation of Co-and Extra Curricular Activities is as per the procedure evolved by the University from time to time.

### 1.3– FINANCIAL ACCOUNTING

#### OBJECTIVE:

The objective of this subject is to acquaint students with the accounting concepts, tools and techniques influencing Business Organizations.

#### Unit 1: INTRODUCTION TO FINANCIAL ACCOUNTING

08 Hrs

Introduction – Meaning and Definition – Objectives of Accounting – Functions of Accounting – Users of Accounting Information – Limitations of Accounting – Accounting Principles – Accounting Concepts and Accounting Conventions- Accounting Standards: List of Indian Accounting Standards.

#### Unit 2: CONVERSION OF SINGLE ENTRY INTO DOUBLE ENTRY SYSTEM 12 Hrs

Single entry system- Meaning – Features – Merits – Demerits – Types. Conversion into Double Entry system – Need for Conversion – Preparation of Statement of Affairs – Cashbook – Memorandum Trading Account – Total Debtors Account – Total Creditors Account – Bills Receivable Account – Bills Payable Account – Trading and Profit & Loss Account and Balance Sheet.

#### Unit 3: HIRE PURCHASE SYSTEM

12 Hrs

Meaning of Hire Purchase and Installment Purchase System- difference between Hire Purchase and Installment Purchase – Important Definitions – Hire Purchase Agreement – Hire Purchase Price – Cash Price – Hire Purchase Charges – Net Hire Purchase Price – Net Cash Price – Calculation of Interest – Calculation of Cash Price – Journal Entries and Ledger Accounts in the books of Hire Purchaser and Hire Vendor (Asset Accrual Method only).

#### Unit 4: ROYALTY ACCOUNTS

12 Hrs

Meaning and definition – Technical Terms – Royalty – Landlord – Tenant – Minimum Rent – Short Workings – Recoupment of Short Working under (Fixed Period) restrictive and non-restrictive (Floating Period) Recoupment within the Life of the Lease – Treatment of Strike and Stoppage of work – Accounting Treatment in the books of Lessee and lessor – journal entries and Ledger Accounts including minimum rent account.

#### Unit 5: CONVERSION OF PARTNERSHIP FIRM INTO A LIMITED COMPANY 12 Hrs

Meaning – Need for conversion - Purchase Consideration – Mode of Discharge of Purchase Consideration – Methods of calculation of Purchase Consideration – Net Payment Method – Net Assets Method –Journal Entries and Ledger Accounts in the books of Vendor – Treatment of items: Dissolution Expenses, Unrecorded Assets and Liabilities, Assets and Liabilities not taken over by the Purchasing Company, Contingent liabilities, Incorporation entries and preparation of balance sheet of the purchasing company under vertical format.

#### SKILL DEVELOPMENT

- List out various accounting concepts and conventions ( GAAP)
- List out Various Accounting Standards
- Collection & recording of Royalty agreement with regard to any suitable situation.
- Collection and recording of Hire Purchase Agreement.
- Ascertainment of Cash Price and Interestwith imaginary figures under Hire Purchase System.

#### BOOKS FOR REFERENCE

1. Arulanandam & Raman – Financial Accounting – I, HPH
2. Jawaharlal & Seema Srivastava :Financial Accounting, HPH
3. Dr. S.N. Maheswari: Financial Accounting, Vikas Publications
4. S P Jain and K. L. Narang: Financial Accounting- I, Kalyani Publishers
5. S. Jayapandian: Financial Accounting from Zero.
6. Radhaswamy and R.L. Gupta: Advanced Accounting , Sultan Chand
7. Guruprasad Murthy: Financial Accounting, HPH
8. Soundarajan & K. Venkataramana, Financial Accounting, SHBP.
9. Dr. Venkataraman & others ( 7 lecturers): Financial Accounting, VBH
10. Dr. Alice Mani: Financial Accounting, SBH.

## 1.4 INDIAN FINANCIAL SYSTEM

### OBJECTIVE

The objective of this subject is to familiarize the students with regard to structure, organization and working of financial system in India.

#### Unit 1: FINANCIAL SYSTEM

12 Hrs

Introduction – Meaning – Classification of Financial System. Financial Markets – Functions and Significance of Primary Market, Secondary Market, Capital Market, & Money Market.

#### Unit 2: FINANCIAL INSTITUTIONS

14 Hrs

Types of Banking and Non-Banking Financial Institutions. Constitution, objectives & functions of IDBI, SFCs, SIDCs, LIC, EXIM Bank. Mutual Funds – features and types.

#### Unit 3: COMMERCIAL BANKS

10 Hrs

Introduction – Role of Commercial Banks – Functions of Commercial Banks – Primary Functions and Secondary Functions – Investment Policy of Commercial Banks. Narasimham committee report on banking sector reforms.

#### Unit 4: REGULATORY INSTITUTIONS

10 Hrs

Reserve Bank of India (RBI) – Organization – Objectives – Role and Functions. The Securities Exchange Board of India (SEBI) – Organization and Objectives.

#### Unit 5: FINANCIAL SERVICES

10 Hrs

Meaning & Definition – Features – Importance. Types of Financial Services – factoring, leasing, venture capital, Consumer finance - housing & vehicle finance.

### SKILL DEVELOPMENT

- Draft a chart showing the financial services in the Indian Financial System.
- List the Instruments traded in the Financial Markets.
- Draft the application forms for opening a Fixed, Current and Savings Bank Accounts.
- Collection and recording for Foreign Exchange rates of different currencies Vis-à-vis Rupee.
- Specimen of Debit and Credit cards.
- Specimen of Cheque with MICR technology.

### BOOKS FOR REFERENCE

1. Vasantha Desai: The Indian Financial System, HPH
2. G. Ramesh Babu; Indian Financial System. HPH
3. Dr. Bharatish Rao, B.R. Bharghavi – Indian Financial System, VBH
4. Meir Kohn: Financial Institutions and Markets, Tata McGraw Hill
5. Dr. Alice Mani: Indian Financial System, SBH.
6. L M Bhole: Financial Institutions and Markets, Tata Mc Graw Hill
7. M Y Khan: Indian Financial System, TMH
8. A Datta ; Indian Financial System, Excel Books
9. D.K. Murthy and Venugopal : Indian Financial System I.K. International Publishers
10. P N Varshney & D K Mittal: Indian Financial System, Sulthan Chand & Sons
11. E Gardon & K Natarajan: Financial Markets & Services, HPH
12. S.C. Sharma and Monica : Indian Financial System I.K. International Publishers
13. K. Venkatramana, Indian Financial System, SHBP.

## 1.5 MARKETING AND SERVICES MANAGEMENT

### OBJECTIVE:

The objective is to familiarize the students with the principles of marketing and focus them towards Marketing and Management of Services

### Unit 1: INTRODUCTION TO MARKETING

10Hrs

Meaning and definition - Goals – Concepts of Marketing – Approaches to Marketing – Functions of Marketing. Recent Trends in Marketing - e-business – Tele-marketing – M-Business – Green Marketing – Retailing, Relationship Marketing – Customer Relationship Management.

### Unit 2: MARKETING ENVIRONMENT

12Hrs

Meaning – demographic- economic – natural – technological – political – legal – socio cultural environment. Market Segmentation and Consumer Behaviour - Meaning & Definition - Bases of Market Segmentation – Consumer Behaviour – Factors influencing Consumer Behaviour.

### Unit 3: MARKETING MIX

16Hrs

Meaning – elements – PRODUCT – product mix, product line – product life cycle – product planning – new product development – branding - packing and packaging. PRICING – factors influencing pricing, methods of pricing (only Meaning), and pricing policy - PHYSICAL DISTRIBUTION, Meaning, factors affecting channels, types of marketing channels, PROMOTION –Meaning and significance of promotion – personal selling and advertising.

### Unit 4: INTRODUCTION TO SERVICES MANAGEMENT

10Hrs

Meaning of services – characteristics of services – classification of services – marketing mix in service industry – growth of service sector in India. Service processes – Designing the service process – service blueprint – back office & front office process.

### UNIT 5: SERVICE SECTOR MANAGEMENT

08 Hrs

Tourism and Travel Services – concept, nature, significance and marketing. Health Care services – concept, nature, significance and marketing. Educational services - concept, nature, significance and marketing.

### SKILL DEVELOPMENT

- Identify the product of your choice and describe in which stage of the product life cycle it is positioned.
- Suggest strategies for development of a new product.
- Study of Consumer Behaviour for a product of your choice.
- Develop an Advertisement copy for a product.
- Prepare a chart for distribution network for different products.

### BOOKS FOR REFERENCE

1. Dr. Shajahan. S; Service Marketing (Concept, Practices & Cases); Himalaya Publishing House; Mumbai; First Edition – Financial Service in India.
2. Philip Kotler - Marketing Management, PHI
3. Rekha. M.P. & Vibha V – Marketing & Services Mgt – VBH.
4. Sunil B. Rao - Marketing & Services Mgt – HPH.
5. Dr. Alice Mani: Marketing & Services Management, SBH.
6. J.C. Gandhi - Marketing Management, TMH
7. Stanton W.J. etzal Michael & Walker, Fundamentals of Management, TMH

8. Jayachandran ; Marketing Management. Excel Books.
9. K. Venkatramana, Marketing Management, SHBP.
10. P N Reddy & Appanniah, Essentials of Marketing Management, HPH
11. Sontakki, Marketing Management, HPH
12. Cengiz Haksever etal – ‘Service Management and Operations’; Pearson Education.
13. Ramesh and Jayanthi Prasad : Marketing Management I.K. International Publishers
14. K. Karunakaran; Marketing Management, HPH.
15. Davar: Marketing Management.

## 1.6 INTRODUCTION TO ACTUARIAL SCIENCE AND MANAGEMENT

**Hours: 50**

### **OBJECTIVES:**

To understand the basic knowledge about Actuarial Science and Management.

### **Unit I: CONCEPT OF ACTUARY**

**10 Hrs**

Meaning and Definition of Actuary; Nature and Characteristics of Actuarial Sciences; Scope of Actuary; Actuarial Skill sets; Careers in actuary. Role of Actuary in Business

### **Unit II: EVOLUTION OF ACTUARIAL SCIENCES**

**12 Hrs**

History, Early Actuaries, Technological advances; Actuarial science related to Modern Financial Economics; Actuaries in criminal justice.

### **Unit III: RISK AND RISK MANAGEMENT PROCESS**

**14 Hrs**

Meaning and Definition of Risk in Insurance, types of risk. Risk Management Process, Loss minimization techniques; Risk management alternatives, Risk control and Risk Financing; Benefits of risk management.

### **Unit IV: CONCEPT OF INSURANCE**

**10 Hrs**

History and Development of Insurance (life and non life insurances ;) Concepts of insurance, the business of insurance, Insurance Markets – intermediaries and customers, the need for professionalism in insurance business, continued professional Development, Insurance education and training.

### **Unit V: THE INSURANCE CONTRACT**

**10 Hrs**

Meaning and definition and essential elements of simple contract, Principles of insurance, Types of insurance, Life and non life insurance products.

### **SKILL DEVELOPMENT**

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### **BOOKS FOR REFERENCE**

- 1.

## 2.3 ADVANCED FINANCIAL ACCOUNTING

### OBJECTIVE :

The objective of this subject is to acquaint the students with the few accounting standards and make them familiar with the accounting procedures for different types of business.

#### Unit 1: INSURANCE CLAIMS

12 Hrs

Introduction – Need – Loss of Stock Policy – Steps for ascertaining Fire insurance claim – Treatment of Salvage – Average Clause – Treatment of Abnormal Items – Computation of Fire insurance claims.

#### Unit 2: CONSIGNMENT ACCOUNTS

12 Hrs

Introduction – Meaning – Consignor – Consignee – Goods Invoiced at Cost Price – Goods Invoiced at Selling Price – Normal Loss – Abnormal Loss – Valuation of Stock – Stock Reserve – Journal Entries – Ledger Accounts in the books of Consignor and Consignee.

#### Unit 3: ACCOUNTING FOR JOINT VENTURES

12 Hrs

Introduction – Meaning – Objectives – Distinction between joint venture and consignment – Distinction between joint venture and partnership – maintenance of accounts in the books of co-venturers – maintaining separate books for joint venture – preparation of memorandum joint venture - problems.

#### Unit 4: BRANCH ACCOUNTS

10 Hrs

Introduction – Meaning – Objectives – Types of Branches - Dependent Branches – Features – Supply of Goods at Cost Price - Invoice Price – Branch Account in the books of Head Office (Debtors System Only).

#### Unit 5 : DEPARTMENTAL ACCOUNTS

10 Hrs

Meaning, Objectives, basis of allocation of expenses, Trading and Profit and Loss Account in Columnar form – (Excluding Inter Departmental Transfers at invoice price)

### SKILL DEVELOPMENT

- Preparation of a claim statement with imaginary figures to submit to Insurance Company.
- Collection of transactions relating to any branch and prepare a branch account.
- List out the basis of Allocation of Departmental Expenses.
- Preparation of Consignment account with imaginary figures
- Preparation of Joint accounts with imaginary figures

### BOOKS FOR REFERENCE:

1. Arulanandam & Raman; Advanced Accountancy, HPH
2. Anil Kumar – Advanced Financial Accounting HPH
3. Dr. Alice Mani: Advanced Financial Accounting, SBH.
4. Dr. S.N. Maheswari, Financial Accounting, Vikas Publication
5. S P Jain and K. L. Narang, Financial Accounting, Kalyani Publication
6. Souandrajan & K. Venkataramana, Financial Accounting, SHBP.
7. A Bannerjee; Financial Accounting.
8. Radhaswamy and R.L. Gupta, Advanced Accounting , Sultan Chand
9. M.C. Shukla and Grewel, Advanced Accounting , S Chand

## 2.4 RETAIL MANAGEMENT

### OBJECTIVE

The objective is to enable students to acquire skills in Retail Management.

#### **Unit 1: INTRODUCTION TO RETAIL BUSINESS** **10 Hrs.**

Definition – functions of retailing - types of retailing – forms of retail business ownership. Retail theories – Wheel of Retailing – Retail life cycle. Retail business in India: Influencing factors – present Indian retail scenario. International perspective in retail business.

#### **Unit 2: CONSUMER BEHAVIOUR IN RETAIL BUSINESS** **12 Hrs.**

Buying decision process and its implication on retailing – Influence of group and individual factors, Customer shopping behaviour, Customer service and customer satisfaction. Retail planning process: Factors to consider in preparing a business plan – implementation – risk analysis.

#### **Unit 3: RETAIL OPERATIONS** **10 Hrs.**

Factors influencing location of Store - Market area analysis – Trade area analysis – Rating Plan method - Site evaluation. Retail Operations: Stores Layout and visual merchandising, Stores designing, Space planning, Inventory management, Merchandise Management, Category Management.

#### **Unit 4: RETAIL MARKETING MIX** **16 Hrs.**

Introduction -Product : Decisions related to selection of goods (Merchandise Management revisited) – Decisions related to delivery of service. Pricing : Influencing factors – approaches to pricing – price sensitivity - Value pricing – Markdown pricing. Place : Supply channel – SCM principles – Retail logistics – computerized replenishment system – corporate replenishment policies. Promotion : Setting objectives – communication effects - promotional mix. Human Resource Management in Retailing – Manpower planning – recruitment and training – compensation – performance appraisal Methods.

#### **Unit 5: IMPACT OF INFORMATION TECHNOLOGY IN RETAILING** **08 Hrs.**

Non store retailing (e-retailing) - The impact of Information Technology in retailing - Integrated systems and networking – EDI – Bar coding – Electronic article surveillance – Electronic shelf labels – customer database management system. Legal aspects in retailing, Social issues in retailing, Ethical issues in retailing.

### SKILL DEVELOPMENT

- Draw a retail life cycle chart and list the stages
- Draw a chart showing a store operations
- List out the major functions of a store manager diagrammatically
- List out the current trends in e-retailing
- List out the Factors Influencing in the location of a New Retail outlet.

### BOOKS FOR REFERENCE

1. Suja Nair; Retail Management, HPH
2. Karthic – Retail Management, HPH
3. S.K. Poddar & others – Retail Management, VBH.
4. R.S Tiwari ; Retail Management, HPH



5. Barry Bermans and Joel Evans: "Retail Management – A Strategic Approach", 8th edition, PHI/02
6. A.J.Lamba, "The Art of Retailing", 1st edition, Tata Mc GrawHill, New Delhi, 2003.
7. Swapna Pradhan : Retailing Management, 2/e, 2007 & 2008, TMH
8. K. Venkataramana, Retail Management, SHBP.
9. James R. Ogden & Denise T.: Integrated Retail Management
10. A Sivakumar : Retail Marketing , Excel Books
11. Ogden : Biztantra, 2007
12. Levy & Weitz : Retail Management -TMH 5th Edition 2002
13. Rosemary Varley, Mohammed Rafiq-: Retail Management
14. Chetan Bajaj : Retail Management -Oxford Publication.
15. Uniyal &Sinha : Retail Management - Oxford Publications.
16. Araif Sakh ; Retail Management

## 2.5 BANKING LAW AND OPERATIONS

### OBJECTIVE

The objective is to familiarize the students with the law and operations of Banking.

### Unit 1: NEGOTIABLE INSTRUMENTS

10 Hrs

Introduction – Meaning & Definition – Features – Kinds of Negotiable Instruments: Meaning, Definition & Features of Promissory Notes, Bills of Exchange, Cheques - Crossing of Cheques – Types of Crossing – Endorsements: Meaning, Essentials & Kinds of Endorsement.

### Unit 2: BANKER AND CUSTOMER RELATIONSHIP

10 Hrs

Introduction – Meaning of Banker – Bank - Meaning of Customer – General & Special Relationships.

### Unit 3: BANKING OPERATIONS

18 Hrs

**Collecting Banker:** Meaning – Duties & Responsibilities of Collecting Banker – Holder for Value – Holder in Due Course - Statutory Protection to Collecting Banker

**Paying Banker:** Meaning – Precautions – Statutory Protection to the Paying Banker – Dishonor of Cheques – Grounds of Dishonor – Consequences of wrongful dishonor of Cheques.

**Lending Operations:** Principles of Bank Lending – Kinds of lending facilities such as Loans, Cash Credit, Overdraft, Bills Discounting, Letters of Credit – NPA: Meaning, circumstances & impact – regulations of priority lending for commercial banks.

### Unit 4: CUSTOMERS AND ACCOUNT HOLDERS

12Hrs

Types of Customers and Account Holders - Procedure and Practice in opening and operating accounts of different customers including Minors - Meaning & Operations of Joint Account Holders, Partnership Firms, Joint Stock companies, Executors and Trustees, Clubs and Associations and Joint Hindu Undivided Family.

### Unit 5: BANKING INNOVATIONS

06 Hrs

New technology in Banking – E-services – Debit and Credit cards. Internet Banking, ATM, Electronic Fund Transfer, MICR, RTGS, NEFT, DEMAT.

### SKILL DEVELOPMENT:

- Collect and fill account opening form of SB A/c or Current A/c
- Collect and fill pay in slip of SB A/c or Current A/c.
- Draw specimen of Demand Draft.
- Draw different types of endorsement of cheques.
- Draw specimen of Travellers Cheques / Gift cheques / Credit cheques.
- List various customer services offered by atleast 2 banks of your choice.

### BOOKS FOR REFERENCE

1. Gordon & Natarajan: Banking Theory Law and Practice, HPH
2. S. P. Srivastava ; Banking Theory & Practice, Anmol Publications
3. M. Prakhas, Bhargabhi R: Banking law & Operation, Vision Book House.
4. Tannan M.L: Banking Law and Practice in India, Indian Law House
5. Sheldon H.P: Practice and Law of Banking.
6. K. Venkataramana, Banking Operations, SHBP.
7. Kothari N. M: Law and Practice of Banking.
8. Neelam C Gulati: Principles of Banking Management.
9. Maheshwari. S.N.: Banking Law and Practice, Vikas Publication
10. Shekar. K.C: Banking Theory Law and Practice, Vikas Publication.
11. S. Vipradas & j. K Syan: Bank Lending
12. Gajendra & Poddar : Law and Practice of Banking
13. Dr. Alice Mani: Banking Law and Operation, SBH.

## 2.6 FUNDAMENTALS OF MATHEMATICS AND STATISTICS.

### OBJECTIVES:

To ensure students have grounding in the mathematics and basic statistics that underpin actuarial work.

### Unit I: NUMERICAL METHODS:

12 Hrs

Absolute and proportionate change calculation; Percentage change in quantity; The absolute, proportionate and percentage error calculation; Comparison of actual with expected values or approximate with accurate values; Linear interpolation to ascertain approximate value; Simple iterative methods to solve non linear equations; Simple calculations of Vectors, use of row/column vectors, and unit vectors, additions and subtraction of vectors, multiplication of a vector by a scalar, Determining the magnitude and direction of a vector, the scalar product of two vectors; Matrices-transposition of a matrix, addition, subtractions, multiplication of a matrix by a scalar multiplication of the approximately sized matrices. Calculating of Determinant of a 2x2 matrix; calculation of inverse when such a matrix is non singular.

### Unit II MATHEMATICAL CONSTANTS AND STANDARD FUNCTIONS

8 Hrs

Definition and basic properties of the functions, sketch of graphs of simple functions involving the basic functions, simplification and calculation of expressions involving the functions, Concept of a limit of a function and the 'lim' notation, Concept of bounded function.

### Unit III: ALGEBRA

10Hrs

Powers, logs, polynomials and fractions, simple equations, simultaneous equations, Quadratic equation by factorisation, inequalities in simple cases, Concept of a strict or weak inequality, sums over sets and repeated sums, sum of a series involving finite arithmetic or geometric progression or non terminating geometric progressions, Determination of non terminating geometric series converges, simple first or second order difference equations, Binomial expansion of expressions.

### Unit IV CALCULUS:

10 Hrs

Determination of a derivative interpretation of a derivative as the gradient of a graph, Differentiate the standard function, Evaluation of derivatives of sums, products, use of product rule, quotient rule, chain rule, Concept of a higher order derivative; differentiation, identification of stationary points, Concept of indefinite integral, partial derivative, Evaluation of partial derivatives in simple cases, Determination of extreme values of functions of two variables Integration of standard function, indefinite and definite integrals by inspection; convergence of definite integral, Application of Taylor and Maclaurin series in simplest form.

### Unit V: PROBABILITY AND STATISTICS

16 Hrs

Use of Table, frequency distribution, Graphs – line plot, box plot, bar chart, histogram, stem and leaf plot; Mean Median, Mode, Standard Deviation, range, inter quartile range as appropriate; Meaning of symmetry and skewness,

Concept and definition of probability, meaning of sample space, calculation of probabilities of events in simple situations, Definition and the use of addition rule for the probability, conditional probability, Bayes Theorem to calculate probabilities; Definition of independence;

Application of permutations and combinations to the calculation of probabilities; Meaning of a discrete random variable. Definition of distribution function, and the probability function and its calculations, Meaning of a continuous random variable, Definition of distribution function, and

calculation of probabilities; Definition of expected value of a function of a random variable, the mean, the variance the standard deviation, coefficient , skewness and their calculations.

### **SKILL DEVELOPMENT**

- D

### **BOOKS FOR REFERENCE**

- 1.

### 3.3 CORPORATE ACCOUNTING

#### OBJECTIVE

The objective of this subject is to enable the students to have a comprehensive awareness about the provisions of the Company's Act and Corporate Accounts.

#### Unit 1: UNDERWRITING OF SHARES

08 Hrs

Meaning – Underwriting Commission – Underwriter – functions - Advantages of Underwriting, Types of Underwriting – Marked and Unmarked Applications – Problems (Excluding Journal entries).

#### Unit 2: PROFIT PRIOR TO INCORPORATION

12 Hrs

Meaning – calculation of sales ratio – time ratio – weighted ratio – treatment of capital and revenue expenditure – Ascertainment of pre-incorporation and post-incorporation profits by preparing Profit and Loss Account and Balance Sheet.

#### Unit 3: VALUATION OF GOODWILL

08 Hrs

Meaning – Circumstances of Valuation of Goodwill – Factors influencing the value of Goodwill – Methods of Valuation of Goodwill: Average Profit Method, Super Profit Method, Capitalization of average Profit Method, Capitalization of Super Profit Method, and Annuity Method - Problems.

#### Unit 4: VALUATION OF SHARES

08 Hrs

Meaning – Need for Valuation – Factors Affecting Valuation – Methods of Valuation: Intrinsic Value Method, Yield Method, Earning Capacity Method, Fair Value of shares. Rights Issue and Valuation of Rights Issue - Problems.

#### Unit 5: COMPANY FINAL ACCOUNTS

20 Hrs

Statutory Provisions regarding preparation of Company Final Accounts –Treatment of Special Items – Tax deducted at source – Advance payment of Tax – Provision for Tax – Depreciation – Interest on debentures – Dividends – Rules regarding payment of dividends – Transfer to Reserves – Preparation of Profit and Loss Account and Balance Sheet in vertical form (As per 2011 revised format)

#### SKILL DEVELOPMENT

- Collect and fill the share application form of a limited Company.
- Collect Prospectus of a company and identify its salient features.
- Collect annual report of a Company and List out its assets and Liabilities.
- Collection of latest final accounts of a company and find out the intrinsic value of shares
- Collect the annual reports of company and calculate the value of goodwill under different methods

#### BOOKS FOR REFERENCE

1. Arulanandam & Raman ; Corporate Accounting –II
2. Anil Kumar – Financial Accounting, HPH
3. Dr. S.N. Maheswari, Financial Accounting.
4. Soundarajan. A & K. Venkataramana, Corporate Accounting, VBH.
5. S. P. Jain and K. L. Narang – Corporate Accounting
6. S. Bhat- Corporate Accounting.
7. S P Iyengar, Advanced Accountancy, Sultan Chand
8. R L Gupta, Advanced Accountancy.
9. Shukla and Grewal – Financial Accounting.

### 3.4 FINANCIAL MANAGEMENT

#### OBJECTIVE

The objective is to enable students to understand the basic concepts of Financial Management and the role of Financial Management in decision-making.

#### Unit 1: INTRODUCTION FINANCIAL MANAGEMENT

10 Hrs

Introduction – Meaning of Finance – Business Finance – Finance Function – Aims of Finance Function – Organization structure of Finance Department - Financial Management – Goals of Financial Management – Financial Decisions – Role of a Financial Manager – Financial Planning – Steps in Financial Planning – Principles of Sound Financial Planning – Factors influencing a sound financial plan.

#### Unit 2: TIME VALUE OF MONEY

12 Hrs

Introduction – Meaning & Definition – Need – Future Value (Single Flow – Uneven Flow & Annuity) – Present Value (Single Flow – Uneven Flow & Annuity) – Doubling Period – Concept of Valuation: Valuation of Bonds, Debentures and shares - Simple Problems.

#### Unit 3: FINANCING DECISION

12 Hrs

Introduction – Meaning of Capital Structure – Factors influencing Capital Structure – Optimum Capital Structure – Computation & Analysis of EBIT, EBT, EPS – Leverages. Simple Problems.

#### Unit 4: INVESTMENT & DIVIDEND DECISION

16 Hrs

Investment Decision: Introduction – Meaning and Definition of Capital Budgeting – Features – Significance – Process – Techniques: Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return and profitability index Simple Problems. Dividend Decision: Introduction – Meaning and Definition – Determinants of Dividend Policy – Types of Dividends – Bonus share

#### Unit 5: WORKING CAPITAL MANAGEMENT

06 Hrs

Introduction – Concept of Working Capital – Significance of Adequate Working Capital – Evils of Excess or Inadequate Working Capital – Determinants of Working Capital – Sources of Working Capital.

#### SKILL DEVELOPMENT

- Draw the organization chart of Finance Function of a company.
- Evaluate the NPV of an investment made in any one of the capital projects with imaginary figures for 5 years.
- Capital structure analysis of companies in different industries
- Imaginary figures prepare an estimate of working capital requirements

#### BOOKS FOR REFERENCE

1. S N Maheshwari, Financial Management, Sultan Chand
2. Dr. Aswathanarayana.T – Financial Management, VBH
3. K. Venkataramana, Financial Management, SHBP.
4. G. Sudarshan Reddy, Financial Management, HPH
5. Roy – Financial Management, HPH
6. Khan and Jain, Financial Management, TMH
7. S. Bhat- Financial Management.
8. Sharma and Sashi Gupta, Financial Management, Kalyani Publication.
9. I M Pandey, Financial Management. Vikas Publication.
10. Prasanna Chandra, Financial Management, TMH
11. P.K Simha – Financial Management.
12. M. Gangadhar Rao & Others , Financial management
13. Dr. Alice Mani: Financial Management, SBH.

### 3.5 BUSINESS ETHICS

#### OBJECTIVE

The objective is to provide basic knowledge of business ethics and values and its relevance in modern context.

#### **Unit 1: BUSINESS ETHICS 12 Hrs**

Introduction – Meaning - Scope – Types of Ethics – Characteristics – Factors influencing Business Ethics – Importance of Business Ethics - Arguments for and against business ethics- Basics of business ethics - Corporate Social Responsibility – Issues of Management – Crisis Management

#### **Unit 2: PERSONAL ETHICS 12 Hrs**

Introduction – Meaning – Emotional Honesty – Virtue of humility – Promote happiness – karma yoga – proactive – flexibility and purity of mind.

#### **Unit 3: ETHICS IN MANAGEMENT 12 Hrs**

Introduction – Ethics in HRM – Marketing Ethics – Ethical aspects of Financial Management – Technology Ethics and Professional ethics.

#### **Unit 4: ROLE OF CORPORATE CULTURE IN BUSINESS 12 Hrs**

Meaning – Functions – Impact of corporate culture – cross cultural issues in ethics

#### **Unit 5: CORPORATE GOVERNANCE 12 Hrs**

Meaning, scope, composition of BODs, Cadbury Committee, various committees, reports on corporate governance, scope of Corporate Governance, Benefits and Limitations of Corporate Governance with living examples.

#### SKILL DEVELOPMENT

- State the arguments for and against business ethics
- Make a list of unethical aspects of finance in any organization
- List out ethical problems faced by managers
- List out issues involved in Corporate Governance.
- List out unethical aspects of Advertising

#### BOOKS FOR REFERENCE

1. Murthy CSV: Business Ethics and Corporate Governance, HPH
2. Bholanath Dutta, S.K. Podder – Corporation Governance, VBH.
3. Dr. K. Nirmala, Karunakara Readdy : Business Ethics and Corporate Governance, HPH
4. H.R.Machiraju: Corporate Governance
5. K. Venkataramana, Corporate Governance, SHBP.
6. N.M.Khandelwal : Indian Ethos and Values for Managers
7. S Prabhakaran; Business ethics and Corporate Governance
8. C.V. Baxi: Corporate Governance
9. R. R. Gaur, R. Sanghal, G. P. Bagaria; Human Values and Professional ethics
10. B O B Tricker, Corporate Governance; Principles , Policies and Practices
11. Michael, Blowfield; Corporate Responsibility
12. Andrew Crane; Business Ethics
13. Ghosh; Ethics in Management and Indian ethos.

### 3.6 FINANCE AND FINANCIAL MATHEMATICS.

#### **OBJECTIVE:**

To provide foundation in Finance and Financial Mathematics with simple applications.

#### **Unit I: THE KEY PRINCIPLES OF FINANCE:**

**08 Hrs**

Definitions of principal terms in investment and Asset management; Relationship between finance and real resources; between finance and organisation objectives; between stakeholders; role and effects of the capital markets, Agency Theory, theory of maximisation of shareholders wealth.

#### **Unit II CASH FLOW MODELS:**

**10 hrs**

Uses of a generalised cash flow model to describe finance transactions; inflows and outflows in cash flow process in each future time period; Amount and timing are fixed or uncertain, the operation of a zero coupon bond, fixed interest security, an index linked security, cash and deposit an equity, interest only loan, a property and an annuity certain in the cash flow model.

#### **Unit III TIME VALUE OF MONEY:**

**12 Hrs**

Concepts of simple interest, compound interest, and discounting; Definition of present value of a future payment, effect of compound interest; relationship between the rates of interest and discount; Difference between nominal and effective rates of interest; Meaning of real and money interest rates; Calculation of present value and the accumulated value. Discount and accumulate sum of money; Compound interest functions including annuities certain.

**Loan Repayments:** Repayment of loan by regular instalments and capital; Flat rates and annual effective rates of interest; Calculation of a schedule of repayment of a loan, Bifurcation interest and capital components.

#### **Unit IV DISCOUNTED CASH FLOW TECHNIQUES:**

**12 Hrs**

Meaning discounted cash flow uses of discounted cash flow techniques in investment project appraisal. Calculations of Net Present Value, Internal Rate Return, Weighted rate of return, Time weighted rate of return and the linked internal rate of return for cash flows of investment project or a fund. **Investment and Risk Characteristics:** Investment and risk characteristics for fixed interest, government borrowings, fixed interest borrowing, shares, derivative

#### **Unit V: COMPOUND INTEREST PROBLEMS**

**14 Hrs**

Elementary compound interest problems assuming tax free investor, calculations of present value of payments from a fixed interest security with constant coupon rate, and security is redeemable in one instalment, calculation of running yield and redemption yield; Present value or Yield calculations from an equity share, and a property with simple assumptions, about the growth of dividends and rents; Index linked bond present value calculation with assumptions about rate of inflation.

**Term Structure interest Rates:** Factors influencing the Term Structure Interest Rates; Meaning of par yield and yield to maturity; Meaning and calculation of discrete spot and forward rates.

#### **SKILL DEVELOPMENT:**

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#### **BOOKS FOR REFERENCE:**

- 1.



### 3.7 PUBLIC RELATIONS AND CORPORATE COMMUNICATION

#### OBJECTIVE

To create awareness among the students on the soft skills required to plan and pursue a career and empower them with employability skills.

#### Unit 1: ATTITUDE AND EMOTIONAL INTELLIGENCE

10 Hrs

Importance of Attitude – Meaning of Positive Thinking and Positive Attitude – Ways to build positive attitude – Effects of negative attitude and measures to overcome them. Significance of interpersonal relationships in personal and professional life - Tips to enhance interpersonal relationships - Emotional Intelligence.

#### Unit 2: VISION, GOAL SETTING & TIME MANAGEMENT

06 Hrs

Meaning of Vision – Doing things for the right purpose – Setting and achieving goals – Importance of goal setting – periodicity in goal setting – short, medium, long-term – methods to achieve set goals. General principles of Stress Management and Time Management.

#### Unit 3: CREATIVITY

10 Hrs

The creative mind – Importance of Creativity – Elements of Creativity – Influence and Flexibility – Factors influencing creativity – Methods of enhancing creativity – techniques of creativity – Brainstorming, attributes listing.

#### Unit 4: COMMUNICATION SKILLS

10 Hrs

Significance – Process of Communication – Forms of Communication - Communication Gap – Listening Skills – Basics of Managerial Speaking Skills – Body Language – How to develop matter for a speech, Presentation aids and effective use of presentation aids. Preparation of Resume & preparation for GD & Interview.

#### Unit 5: CAREER PLANNING

06Hrs

Career Planning, Awareness of different Careers, Sources of Information, Choosing a Career and Career counseling.

#### SKILL DEVELOPMENT:

- Extempore speeches, Just a Minute.
- Conducting Stress Interviews.
- Creative Exercise
- Role play.

#### BOOKS FOR REFERENCE:

1. C.S. Raydu – Corporate Communication, HPH
2. Rai & Rai Business Communication, HPH
3. S.P. Sharman, Bhavani H. – Corporate Communication, VBH
4. Collins: Public Speaking
5. Mair : Art of Public Speaking
6. K. Venkataramana, Corporate Communication, SHBP.
7. Rajkumar: Basic of Business Communication
8. V.N. Ahuja.: The World's Famous Speeches
9. Daniel Goleman : Emotional Intelligence
10. Jyotsna Codety :Understanding Emotional Intelligence .

11. Dalip Singh :Emotional Intelligence at Work .
12. B. Das / I Satpathy: Business Communication & Personality Development.
13. B.Husluck :Personality Development – Elizabeth.
14. M.S. Rao: Soft Skills – Enhancing Employability I.K. International Publishers
15. Allen Bease :Body Language .
16. Tanushree Pooder :Fit and Fine Body and Mind
17. C.G.G Krishnamacharyulu & Lalitha :Soft Skills of Personality Development;
18. Partho Pratim Roy :Business Communications – The Basics
19. Sajitha Jayaprakash :Technical Communication

### 4.3 ADVANCED CORPORATE ACCOUNTING

#### OBJECTIVE

The objective is to enable the students to develop awareness about Corporate Accounting in conformity with the Provision of Companies' Act and latest amendments thereto with adoption of Accounting Standards.

#### Unit 1: REDEMPTION OF PREFERENCE SHARES

10 Hrs

Meaning – legal provisions – treatment regarding premium on redemption – creation of Capital Redemption Reserve Account– Fresh issue of shares – Arranging for cash balance for the purpose of redemption – minimum number of shares to be issued for redemption – issue of bonus shares – preparation of Balance sheet (vertical forms) after redemption.

#### Unit 2: MERGERS AND ACQUISITION OF COMPANIES

16 Hrs

Meaning of Amalgamation and Acquisition – Types of Amalgamation – Amalgamation in the nature of Merger – Amalgamation in the nature of Purchase - Methods of Purchase Consideration – Calculation of Purchase Consideration (Ind AS 103) (Old AS14), Net asset Method - Net Payment Method, Accounting for Amalgamation (Problems on both the methods) - Entries and Ledger Accounts in the Books of Transferor Company and Transferee Company – Preparation of new Balance sheet. (Vertical Format) (Excluding External Reconstruction).

#### Unit 3: INTERNAL RECONSTRUCTION

10 Hrs

Meaning – Objective – Procedure – Form of Reduction –Passing of Journal Entries – Preparation of Reconstruction accounts – Preparation of Balance Sheet after Reconstruction. (Vertical Format) Problems.

#### Unit 4: LIQUIDATION OF COMPANIES

10Hrs

Meaning–Types of Liquidation – Order of Payment - Calculation of Liquidator's Remuneration – Preparation of Liquidators Final Statement of Account.

#### Unit 5: RECENT DEVELOPMENTS IN ACCOUNTING & ACCOUNTING STANDARDS (Theory Only)

10Hrs

Human Resource Accounting – Environmental Accounting – Social Responsibility Accounting – Valuation of Brand.

Indian Accounting Standards- Meaning- Need for accounting standards in India- Accounting standards Board (ASB) process of setting accounting standards in India- A brief theoretical study of Indian accounting standards.

#### SKILL DEVELOPMENT

- List out legal provisions in respect of Redemption of Preference shares.
- Calculation of Purchase consideration with imaginary figures.
- List any 5 cases of amalgamation in the nature of merger or acquisition of Joint Stock Companies.
- List out legal provisions in respect of internal reconstruction.
- List out any five Indian Accounting Standards disclosures.

#### BOOKS FOR REFERENCE

1. Arulanandam & Raman ; Corporate Accounting-II, HPH
2. Anil Kumar – Advanced Corporate Accounting, HPH
3. Roadmap to IFRS and Indian Accounting Standards by CA Shibarama Tripathy
4. Dr. Venkataraman. R – Advanced Corporate Accounting
5. S.N. Maheswari , Financial Accounting, Vikas
6. Soundarajan A & K. Venkataramana, Advanced Corporate Accounting, SHBP.
7. RL Gupta, Advanced Accountancy, Sultan Chand
8. K.K Verma – Corporate Accounting.
9. Jain and Narang, Corporate Accounting.
10. Tulsian, Advanced Accounting,
11. Shukla and Grewal – Advanced Accountancy , Sultan Chand
12. Srinivas Putty, Advanced Corporate Accounting, HPH.
13. Sreeram & Sreeram, Advanced Corporate Accounting, Adhrash Publishing House.

## 4.4 COST ACCOUNTING

### OBJECTIVE

The objective of this subject is to familiarize students with the various concepts and elements of cost.

### Unit 1: INTRODUCTION TO COST ACCOUNTING

10 Hrs

Introduction – Meaning & Definition of Cost, Costing and Cost Accounting – Objectives of Costing - Comparison between Financial Accounting and Cost Accounting – Designing and Installing a Cost Accounting System – Cost Concepts - Classification of Costs – Cost Unit – Cost Center – Elements of Cost – Preparation of Cost Sheet – Tenders and Quotations.

### Unit 2: MATERIAL COST CONTROL

14 Hrs

Meaning – Types: Direct Material, Indirect Material. Material Control – Purchasing Procedure – Store Keeping – Techniques of Inventory Control – Levels settings – EOQ – ABC Analysis – VED Analysis – Just In-Time – Perpetual Inventory System – Documents used in Material Accounting - Methods of Pricing Material Issues: FIFO, LIFO, Weighted Average Price Method and Simple Average Price Method - Problems.

### Unit 3: LABOUR COST CONTROL

10 Hrs

Meaning – Types: Direct Labour, Indirect Labour - Timekeeping – Time booking – Idle Time – Overtime – Labour Turn Over. Methods of Labour Remuneration: Time Rate System, Piece Rate System, Incentive Systems (Halsey plan, Rowan Plan & Taylor's differential Piece Rate System) – Problems

### Unit 4: OVERHEAD COST CONTROL

14 Hrs

Meaning and Definition – Classification of Overheads – Procedure for Accounting and Control of Overheads – Allocation of Overheads – Apportionment of Overheads – Primary Overhead Distribution Summary – Secondary Overhead Distribution Summary – Repeated Distribution Method and Simultaneous Equations Method – Absorption of Factory Overheads – Methods of Absorption (Theory Only) – Machine Hour Rate – Problems on Machine Hour Rate.

### Unit 5: RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

08 Hrs

Need for Reconciliation – Reasons for differences in Profit or Loss shown by Cost Accounts and Profit or Loss shown by Financial Accounts – Preparation of Reconciliation Statement and Memorandum Reconciliation Account.

### SKILL DEVELOPMENT

- Identification of elements of cost in services sector by Visiting any service sector.
- Cost estimation for the making of a proposed product.
- Draft the specimen of any two documents used in material account.
- Collection and Classification of overheads in an organization on the basis of functions.
- Prepare a reconciliation statement with imaginary figures

### BOOKS FOR REFERENCE

1. J. Made Gowda – Cost and Management Accounting , HPH
2. M.V. Skukla – Cost and Management Accounting
3. N.K. Prasad: Cost Accounting, Books Syndicate Pvt. Ltd.
4. Nigam & Sharma: Cost Accounting , HPH
5. Khanna Pandey & Ahuja – Practical Costing, S Chand
6. Soundarajan A & K. Venkataramana, Cost Accounting, SHBP.

7. P. K Sinha – Accounting & Costing for Managers.
8. M.L. Agarwal: Cost Accounting
9. Dr. Alice Mani: Cost Accounting, SBH.
10. S.P Jain & Narang: Cost Accounting , Kalyani
11. Palaniappan and Hariharan : Cost Accounting I.K. International Publishers
12. S.P. Iyengar: Cost Accounting, Sultan Chand ans Sons
13. S.N. Maheshwari: Cost Accounting, Vikas
14. M. N. Arora: Cost Accounting, HPH
15. Dutta: Cost Accounting
16. V. Rajesh Kumar & R.K. Sreekantha, Cost Accounting – I, Vittam Publications.

## 4.5 E-BUSINESS AND ACCOUNTING

### OBJECTIVE:

The objective of the subject is to familiarize the students with E- Commerce models and Tally

### UNIT 1. E-BUSINESS

10 Hrs

Introduction, E-Commerce – Definition, History of E-commerce, Difference between E - Commerce and E - Business. Comparison of traditional commerce and e-commerce Advantages/ Disadvantages of e-commerce,. E-Commerce business models – major B to B, B to C model, Consumer-to-Consumer (C2C), Consumer-to-Business (C2B) model, Peer to-Peer (P2P) model – emerging trends. web auctions, virtual communities, portals, e-business revenue models.

### UNIT 2. HARDWARE AND SOFTWARE FOR E-BUSINESS

10Hrs

Web server – Internet – World Wide Web - hardware and software for web servers, web hosting choices – shopping cart.

### Unit 3: GETTING STARTED WITH TALLY

10Hrs

Meaning of Tally software – Features – Advantages - Required Hardware, Preparation for installation of tally software - installation. Items on Tally screen: Menu options, creating a New Company, Basic Currency information, Other information, Company features and Inventory features.

### Unit 4: CONFIGURING TALLY

16Hrs

General Configuration, Numerical symbols, accts/inv info – master configuration -voucher entry configuration. **Working in Tally:** Groups, Ledgers, writing voucher, different types of voucher, voucher entry Problem on Voucher entry -Trail Balance, Accounts books, Cash Book, Bank Books, Ledger Accounts, Group Summary, Sales Register and Purchase Register, Journal Register, Statement of Accounts, & Balance Sheet.

### Unit 5: REPORTS IN TALLY:

10Hrs

Generating Basic Reports in Tally – Financial Statements – Accounting Books and Registers – Inventory Books and Registers – Exception reports – printing reports – Types of Printing Configuration of Options – Printing Format.

### SKILL DEVELOPMENT:

- Generating the report of journal
- Generating the report on cash book
- Generating the report on profit and losing account
- Generating the report on balance sheet

### BOOKS FOR REFERENCE

1. Raydu – E Commerce, HPH
2. Suman. M – E Commerc & Accounting - HPH
3. Kalakota Ravi and A. B. Whinston : *Frontiers of Electronic Commerce*, Addison Wesley
4. Watson R T : *Electronic Commerce – the strategic perspective*. The Dryden press
5. Amrutha Gowry & Soundrajana, E – Business & Accounting, SHBP.
6. C.S.V Murthy- E Commerce, HPH
7. Agarwala K.N and Deeksha Ararwala: *Business on the Net – Whats and Hows of E-Commerce*
8. Agarwala K. N. and Deeksha Ararwala : *Business on the Net – Bridge to the online store front*, Macmillan, New Delhi.
9. P. Diwan / S. Sharma – E – Commerce
10. Srivatsava: E.R.P, I.K. International Publishers
11. Diwan, Prag and Sunil Sharma, *Electronic Commerce – A manager guide to E-business*, Vanity Books International, Delhi
12. Tally for Enterprise Solutions

## 4.6. STOCK AND COMMODITY MARKETS

### OBJECTIVE:

The objective is to provide students with a conceptual framework of stock markets and Commodity Markets, functionalities in these markets and their mode of trading.

### Unit: 1 AN OVERVIEW OF CAPITAL AND COMMODITIES MARKETS: 10 Hrs

Primary Market, Secondary Market (Stock Market), Depositories, Private placements of shares / Buy back of shares, Issue mechanism. Meaning of Commodities and Commodities Market, differences between stock market and commodities market.

### Unit: 2 STOCK MARKET: 12Hrs

History, Membership, Organization, Governing body, Functions of stock Exchange, on line trading, role of SEBI, Recognized Stock Exchanges in India (brief discussion of NSE and BSE). Derivatives on stocks: Meaning, types (in brief).

### Unit:3 TRADING IN STOCK MARKET: 14Hrs

Patterns of Trading & Settlement – Speculations – Types of Speculations – Activities of Brokers – Broker Charges – Settlement Procedure, National Securities Depository Ltd.(NSDL), Central Securities Depository Ltd.(CSDL) (in brief).

### Unit: 4 COMMODITIES MARKET: 12Hrs

History, Membership, Objectives, Functions of commodities exchange, Organization and role of commodity exchange, Governing Body, Types of Transactions to be dealt in Commodity Market – physical market, Futures market - Differences between Physical & Future Market, options on commodities exchanges.

### Unit: 5 TRADING IN COMMODITY MARKETS: 08Hrs

Patterns of Trading & Settlement, Efficiency of Commodity Markets - Size of volumes of Commodities

### SKILL DEVELOPMENT

- Prepare the list of recognized stock exchanges in India
- Prepare the process chart of online trading of shares and debentures.
- Prepare the chart showing Governing Body of the Commodities Market.
- Prepare the list of commodities traded on commodity market.
- Enlist the role of NSDL and CSDL.

### BOOKS FOR REFERENCE:

1. Gurusamy, Financial Markets and Institutions, 3rd edition, Tata McGraw Hill.
2. Saunders, Financial Markets and Institutions, 3rd edition, Tata McGraw Hill.
3. K. Venkataramana, Stock & Commodity Markets, SHBP.
4. B. Kulkarni – Commodity Markets & Derivatives.
5. Khan, Indian Financial Systems, 6th edition, Tata McGraw Hill
6. Bhole, L.M. (2000), Indian Financial Institutions, Markets and Management, McGraw Hill, New York.
7. Srivastava R.M ; Management of Indian Financial Institutions
8. Pallavi Modi : Equity – The Next Investment Destination
9. Prisswami – Indian Financial System
10. Ghowria Khatoon – Stock & Commodity Markets, VBH.

## 4.7 PRINCIPLES OF EVENT MANAGEMENT

### OBJECTIVE:

The objective is to provide students with a conceptual framework of Event Management, Event Services, Conducting Event and Managing Public Relations.

### Unit: 1- INTRODUCTION TO EVENT MANAGEMENT

12 Hrs

Event- Meaning- Why Event Management- Analysis of Event, Scope of Event, Decision Makers- Event Manager Technical Staff- Establishing of Policies & Procedure- Developing Record Keeping Systems.

### Unit: 2-EVENT MANAGEMENT PROCEDURE

12 Hrs

Principles for holding an Event, General Details, Permissions- Policies, Government and Local Authorities, - Phonographic Performance License, Utilities- Fire Bridge Ambulance Catering, Electricity, Water Taxes Applicable.

### Unit: 3-CONDUCT OF AN EVENT.

12 Hrs

Preparing a Planning Schedule, Organizing Tables, Assigning Responsibility, Communication and Budget of Event- Checklist, Computer aided Event Management– Roles & Responsibilities of Event Managers for Different Events.

### Unit: 4-PUBLIC RELATIONS

10 Hrs

Introductions to Public Relations- Concept- Nature- Importance- Limitations- Media- Types of Media- Media Management, Public Relation Strategy & Planning. Brain Storming Sessions- Writings for Public Relations.

### Unit: 5 CORPORATE EVENTS

10 Hrs

Planning of Corporate Event, Job Responsibility of Corporate Events Organizer, Arrangements, Budgeting, Safety of Guests and Participants, Creating Blue Print, Need for Entertainment in Corporate Events And Reporting.

### Skill Development

1. Preparation of Event Plan for Wedding, Annual general body Meeting of an MNC.
2. Preparing Budget for conduct of National level intercollegiate sports events.
3. Preparation of Event Plan for College day Celebrations
4. Preparation of Budget for Conducting inter collegiate Commerce Fest.

### Book References

1. Event Entertainment and Production – Author: Mark Sonderm CSEP Publisher: Wiley & Sons, Inc.
2. Ghouse Basha – Advertising & Media Mgt, VBH.
3. Anne Stephen – Event Management, HPH.
4. K. Venkataramana, Event Management, SHBP.
5. Special Event Production – Doug Matthews – ISBN 978-0-7506-8523-8
6. The Complete Guide to successful Event Planning – Shannon Kilkenny
7. Human Resource Management for Events – Lynn Van der Wagen (Author)
8. Successful Team Management (Paperback) – Nick Hayed (Author)
9. Event Management & Public Relations by Savita Mohan – Enkay Publishing House
10. Event Management & Public Relations By Swarup K. Goyal – Adhyayan Publisher - 2009



## 5.1 ENTREPRENEURSHIP DEVELOPMENT

### OBJECTIVE:

To enable students to understand the basic concepts of entrepreneurship and preparing a business plan to start a small industry.

### Unit 1: ENTREPRENEURSHIP

10 Hrs

Introduction – Meaning & Definition of Entrepreneurship, Entrepreneur & Enterprise – Functions of Entrepreneur - Factors influencing Entrepreneurship - Pros and Cons of being an Entrepreneur – Qualities of an Entrepreneur – Types of Entrepreneur

### Unit 2: SMALL SCALE INDUSTRIES

12 Hrs

Meaning & Definition – Product Range - Capital Investment - Ownership Patterns – Meaning and importance of Tiny Industries, Ancillary Industries, Cottage Industries. Role played by SSI in the development of Indian Economy. Problems faced by SSI's and the steps taken to solve the problems - Policies Governing SSI's.

### Unit 3: FORMATION OF SMALL SCALE INDUSTRY

14 Hrs

Business opportunity, scanning the environment for opportunities, evaluation of alternatives and selection based on personal competencies. Steps involved in the formation of a small business venture: location, clearances and permits required, formalities, licensing and registration procedure. Assessment of the market for the proposed project – Financial, Technical, Market and Social feasibility study.

### Unit 4: PREPARING THE BUSINESS PLAN (BP)

10 Hrs

Meaning – importance – preparation – BP format: Financial aspects of the BP, Marketing aspects of the BP, Human Resource aspects of the BP, Technical aspects of the BP, Social aspects of the BP. Common pitfalls to be avoided in preparation of a BP.

### Unit 5: PROJECT ASSISTANCE

10 Hrs

Financial assistance through SFC's, SIDBI, Commercial Banks, IFCI - Non-financial assistance from DIC, SISI, AWAKE, KVIC - Financial incentives for SSI's and Tax Concessions - Assistance for obtaining Raw Material, Machinery, Land and Building and Technical Assistance - Industrial Estates: Role and Types.

### SKILL DEVELOPMENT

- Preparation of a Project report to start a SSI Unit.
- Preparing a letter to the concerned authority-seeking license for the proposed SS Unit
- Format of a business plan.
- A Report on the survey of SSI units in the region where college is located.
- Chart showing financial assistance available to SSI along with rates of interest.
- Chart showing tax concessions to SSI both direct and indirect.
- Success stories of Entrepreneurs in the region.

### BOOKS FOR REFERENCE

1. Vasanth Desai, Management of Small Scale Industry, HPH
2. Mark. J. Dollinger, Entrepreneurship – Strategies and Resources, Pearson Edition.
3. Dr. Venkataramana ; Entrepreneurial Development, SHB Publications

4. Udai Pareek and T.V. Rao, Developing Entrepreneurship
5. Rekha & Vibha – Entrepreneurship Development, VBH
6. S.V.S. Sharma, Developing Entrepreneurship, Issues and Problems
7. B. Janakiraman , Rizwana M: Entrepreneurship Development, Excel Books
8. Srivastava, A Practical Guide to Industrial Entrepreneurs
9. Anil Kumar: Small Business and Entrepreneurship I.K. International Publishers
10. Government of India, Report of the committee on Development of small and medium entrepreneurs, 1975
11. Bharusali, Entrepreneur Development
12. Satish Taneja ; Entrepreneur Development
13. Vidya Hattangadi ; Entrepreneurship
14. N.V.R Naidu : Entrepreneurship Development, I.K. International Publishers

## 5.2 INTERNATIONAL FINANCIAL REPORTING STANDARDS

**OBJECTIVE:** The objective of the subject is to enable the students to understand the need and method of presentation of financial statements in accordance with International Financial Reporting Standards.

### Unit-I

5Hrs

#### **International Financial Reporting Standards:**

Meaning of IFRS - relevance of IFRS to India; merits and limitations of IFRS; process of setting IFRS- Practical challenges in implementing IFRS; a brief theoretical study of International financial reporting standards (IFRS) 1 – 15 - List of International accounting standards issued by IASB.

### Unit – II

25Hrs

#### **Accounting for Assets and Liabilities**

Recognition criteria's for Investment properties, Government grants, Borrowing costs, Construction contracts, share based payments, Provisions, Contingent liabilities and Contingent assets, Events occurring after the reporting period (**Only Theory**).

Recognition and measurement for property plant and equipment, Intangible assets, Inventories, Leases and Impairment. Accounting for Income tax, Employee benefits. - **Simple problems**

### Unit-III

8Hrs

#### **Presentation of Financial Statements:**

Outline for the preparation of financial statements - Statement of financial position; Comprehensive income statement; Statement of changes in equity (SOCE), IAS 18 – Revenue.

Elements of financial statements as per IFRS – Non-current assets; current assets; equity; non-current liability; current liability; revenue; cost of sales; distribution costs; administrative expenses; financial costs – profits attributable to owners of controlling interest and non-controlling interest – **Practical problems on each element.**

### Unit – IV

12Hrs

#### **Accounts of Groups:**

Concept of group – need for consolidated financial statements - Preparation of consolidated financial statements – Procedure for the preparation of consolidated financial position statement – treatment of pre-acquisition profit; goodwill arising on consolidation; on-controlling interests at fair value – **Practical problems.**

### Unit – V

6Hrs

#### **Disclosure Standards**

Related party disclosure, Earnings per share, Interim financial reporting, Insurance contracts, Operating segments. (**Theory Only**).

### **SKILL DEVELOPMENT**

- 1) Conversion of final accounts to IFRS
- 2) Analysis of published financial statements for at-least 2 types of stakeholders
- 3) Comments for recent developments/exposure draft in IFRS
- 4) Preparation of notes to accounts for non-current assets
- 5) Assignment on social reporting
- 6) Preparation of Consolidated Financial Statement of any two existing companies.
- 7) Disclosure of change in equity in the annual reports of any two select companies.

### **Books for reference:**

1. IFRS – Student Study Guide - ISDC
2. IFRS for India, Dr.A.L.Saini, Snow white publications
3. Roadmap to IFRS and Indian Accounting Standards by CA Shibarama Tripathy
4. IFRS explained – a guide to IFRS by BPP learning Media
5. IFRS concepts and applications by Kamal Garg, Bharath law house private limited.
6. IFRS: A quick reference guide by Robert J Kirk, Elsevier Ltd.

## 5.3 INCOME TAX - I

### OBJECTIVE

The Objective of this subject is to expose the students to the various provisions of Income Tax Act 1961 relating to computation of Income of individuals.

#### **Unit 1: INTRODUCTION TO INCOME TAX** **10 Hrs**

Brief History of Indian Income Tax - Legal Frame Work – Types of Taxes - Cannons of Taxation – Important Definitions: Assessment, Assessment Year, Previous Year (including Exceptions), Assessee, Person, Income, Casual Income, Gross Total Income, Agricultural Income (including Scheme of Partial Integration – Theory Only) – Scheme of taxation. Meaning and classification of Capital & Revenue. Income tax authorities: Powers & functions of CBDT, CIT & A.O.

#### **Unit 2: EXEMPTED INCOMES** **04 Hrs**

Introduction – Exempted Incomes U/S 10 - Restricted to Individual Assessee.

#### **Unit 2: RESIDENTIAL STATUS** **10 Hrs**

Residential Status of an Individual –Determination of Residential Status – Incidence of Tax – Problems.

#### **Unit 4: INCOME FROM SALARY** **20 Hrs**

Meaning – Definition - Basis of Charge– Advance Salary – Arrears of Salary – Allowances – Perquisites– Provident Fund - Profits in Lieu of Salary – Gratuity -Commutation of Pension - Encashment of Earned leave - Compensation for voluntary retirement - Deductions from Salary U/S 16 – Problems on Income from Salary.

#### **Unit 5: INCOME FROM HOUSE PROPERTY** **12 Hrs**

Basis of Charge – Deemed Owners – Exempted Incomes from House Property –Composite Rent - Annual Value – Determination of Annual Value – Treatment of Unrealized Rent – Loss due to Vacancy – Deductions from Annual Value – Problems on Income from House Property.

### SKILL DEVELOPMENT

- Form No. 49A (PAN) and 49B.
- Filling of Income Tax Returns.
- List of enclosures to be made along with IT returns (with reference to salary & H.P).
- Preparation of Form 16.
- Computation of Income Tax and the Slab Rates.
- Computation of Gratuity.

### BOOKS FOR REFERENCE

1. Dr. Vinod K. Singhania: Direct Taxes – Law and Practice, Taxmann publication.
2. B.B. Lal: Direct Taxes, Konark Publisher (P) ltd.
3. Dr. Mehrotra and Dr. Goyal: Direct Taxes – Law and Practice, Sahitya Bhavan Publication.
4. Dinakar Pagare: Law and Practice of Income Tax, Sultan Chand and sons.
5. Gaur & Narang: Income Tax.
6. 7 Lectures – Income Tax – I, VBH
7. Dr.V.Rajesh Kumar and Dr.R.K.Sreekantha: Income Tax – I, Vittam Publications.

## 5.4 COSTING METHODS

### OBJECTIVE

To familiarize the students on the use of cost accounting system in different nature of businesses.

#### **Unit 1: INTRODUCTION TO COSTING METHODS** **04 Hrs**

Costing methods – Meaning, Importance and Categories.

#### **Unit 2: JOB AND BATCH COSTING** **12 Hrs**

**Job costing:** Meaning, prerequisites, job costing procedures, Features, objectives, applications, advantages and disadvantages of Job costing. **Batch costing:** Meaning, advantages, disadvantages, determination of economic batch quantity. Comparison between Job and Batch Costing – problems.

#### **Unit 3: PROCESS COSTING** **14 Hrs**

Introduction, meaning and definition, Features of Process Costing, applications, comparison between Job costing and Process Costing, advantages and disadvantages, treatment of normal loss, abnormal loss and abnormal gain, rejects and rectification - Joint and by-products costing – problems under reverse cost method.

#### **Unit 4: CONTRACT COSTING** **14 Hrs**

Meaning, features of contract costing, Applications of contract costing, similarities and dissimilarities between job and contract costing, procedure of contract costing, profit on incomplete contracts, Problems.

#### **Unit 5: OPERATING COSTING** **12 Hrs**

Introduction, Meaning and application of Operating Costing, - Power house costing or boiler house costing, canteen or hotel costing, hospital costing (Theory only) and Transport Costing – Problems on Transport costing.

### SKILL DEVELOPMENT

- Listing of industries located in your area and methods of costing adopted by them
- List out materials used in any two organizations.
- Preparation of Imaginary composite job cost statement
- Preparation of activity base cost statement

### BOOKS FOR REFERENCE

1. S P Iyengar, Cost Accounting.
2. Nigam and Sharma, Advanced Costing.
3. B.S. Raman, Cost Accounting.
4. K.S Thakur- Cost Accounting
5. M.N. Arora, Cost Accounting.
6. Ashish K Bhattacharyya: cost accounting for business managers.
7. N. Prasad, Costing.
8. Palaniappan and Hariharan : Cost Accounting, I.K. International Publishers
9. Jain & Narang, Cost Accounting
10. Ravi M. Kishore – *Cost Management*
11. Charles T Horngren, George Foster, Srikant M. Data – *Cost Accounting: A Managerial Emphasis*
12. Anthony R. N. – *Management Accounting Principles*
13. S. Mukherjee & A. P. Roychowdhury – *Advanced Cost and Management Accountancy*
14. J. Made Gowda Cost Accounting
15. Rathnam : Cost Accounting

## 6.1 BUSINESS REGULATIONS

### OBJECTIVE:

To introduce the students to various Business Regulations and familiarize them with common issues of relevance.

### UNIT 1: INTRODUCTION TO BUSINESS LAWS

06 Hrs

Introduction, Nature of Law, Meaning and Definition of Business Laws, Scope and Sources of Business Laws.

### UNIT 2: CONTRACT LAWS

18Hrs

Indian Contract Act, 1872: Definition of Contract, essentials of a valid contract, classification of contracts, remedies for breach of contract.

Indian Sale of Goods Act, 1930: Definition of contract of sale, essentials of contract of sale, conditions and warranties, rights and duties of buyer, rights of an unpaid seller.

### UNIT 3: COMPETITION AND CONSUMER LAWS:

14 Hrs

The Competition Act, 2002: Objectives of Competition Act, Features of Competition Act, CAT, offences and penalties under the Act, Competition Commission of India.

Consumer Protection Act, 1986: Definition of the terms consumer, consumer dispute, defect, deficiency, unfair trade practices and services. Rights of the consumer under the Act, Consumer Redressal Agencies – District Forum, State Commission, National Commission.

### UNIT 4: ECONOMIC LAWS

12 Hrs

Indian Patent Laws and WTO Patent Rules: Meaning of IPR, invention and non-invention, procedure to get patent, restoration and surrender of lapsed patent, infringement of patent,

FEMA 1999: Objects of FEMA, salient features of FEMA, definition of important terms: authorized person, currency, foreign currency, foreign exchange, foreign security, offences and penalties.

### UNIT 5: ENVIRONMENTAL LAW

06 Hrs

Environment Protection Act, 1986: Objects of the Act, definitions of important terms: environment, environment pollutant, environment pollution, hazardous substance and occupier, types of pollution, rules and powers of central government to protect environment in India.

### SKILL DEVELOPMENT

- Prepare a chart showing sources of business law and Indian Constitution Articles having economic significance.
- Draft an agreement on behalf of an MNC to purchase raw materials indicating therein terms and conditions and all the essentials of a valid contract.
- Draft an application to the Chief Information Officer of any government office seeking information about government spending.
- Draft digital signature certificate.
- Draft a complaint to District Consumer Forum on the deficiency of service in a reputed corporate hospital for medical negligence.
- Collect leading cyber-crimes cases and form groups in the class room and conduct group discussion.
- Draft a constructive and innovative suggestions note on global warming reduction.

### BOOKS FOR REFERENCE:

1. K. Aswathappa, Business Laws, HPH,
2. Bulchandni, Business Laws, HPH.
3. K. Venkataramana, Business Regulations, SHBP.
4. Kamakshi P & Srikumari P – Business Regulations, VBH.
5. N.D. Kapoor, Business Laws, Sultan chand publications.
6. S.S Gulshan – Business Law
7. S.C. Sharma: Business Law I.K. International Publishers
8. Tulsion Business Law, TMH.

## 6.2 PRINCIPLES AND PRACTICE OF AUDITING

### OBJECTIVE:

This subject aims at imparting knowledge about the principles and methods of auditing and their applications.

### Unit 1: INTRODUCTION TO AUDITING

12 Hrs

Introduction – Meaning - Definition – Objectives – Differences between Accountancy and Auditing – Types of Audit - Advantages of Auditing – Preparation before commencement of new Audit – Audit Notebook – Audit Working Papers – Audit Program, Recent Trends in Auditing: Nature & Significance of Tax Audit – Cost Audit - Management Audit.

### Unit 2: INTERNAL CONTROL

10 Hrs

Internal Control: Meaning and objectives. Internal Check: Meaning, objectives and fundamental principles. Internal Check as regards: Wage Payments, Cash Sales, Cash Purchases. Internal Audit: Meaning - Advantages and Disadvantages of Internal Audit – Differences between Internal Check and Internal Audit.

### Unit 3: VOUCHING

12 Hrs

Meaning - Definition – Importance – Routine Checking and Vouching – Voucher -Types of Vouchers – Vouching of Receipts: Cash Sales, Receipts from debtors, Proceeds of the sale of Investments. Vouching of Payments: Cash Purchases, Payment to Creditors, Deferred Revenue Expenditure.

### Unit 4: VERIFICATION AND VALUATION OF ASSETS AND LIABILITIES

12 Hrs

Meaning and Objectives of verification and valuation– Position of an Auditor as regards the Valuation of Assets – Verification and Valuation of different Items: Assets: Land & Building, Plant & Machinery, Goodwill – Investments - Stock in Trade. Liabilities: Bills Payable - Sundry Creditors – Contingent Liabilities.

### Unit 5: AUDIT OF LIMITED COMPANIES AND OTHERS

10 Hrs

Company Auditor – Appointment – Qualification - Powers - Duties and Liabilities – Professional Ethics of an Auditor. Audit of Educational Institutions – Audit of Insurance Companies- Audit of Co-operative societies.

### SKILL DEVELOPMENT:

- Collect the information about types of audit conducted in any one Organization
- Visit an audit firm, write about the procedure followed by them in Auditing the books of accounts of a firm.
- Draft an investigation report on behalf of a Public Limited Company
- Record the verification procedure with respect to any one fixed asset.
- Draft an audit program.

### BOOKS FOR REFERENCE:

1. P N Reddy & Appannaiah, Auditing, HPH
2. TR Sharma, Auditing, Sahitya Bhavan
3. BN Tandon, Practical Auditing, Sultan Chand
4. Dr. Nanje Gowda, Principles of Auditing, VBH
5. Dr. Alice Mani: Principles & Practices of Auditing, SBH.
6. K. Venkataramana, Principles And Practice Of Auditing, SHBP.
7. MS Ramaswamy, Principles and Practice of Auditing.
8. Dinakar Pagare, Practice of Auditing, Sultan Chand
9. Kamal Gupta, Practical Auditing, TMH
10. R.G Sexena - Principles and Practice of Auditing, HPH

## 6.3 INCOME TAX - II

### OBJECTIVE

The Objective of this subject is to make the students to understand the computation of Taxable Income and Tax Liability of individuals.

#### **Unit 1: PROFITS AND GAINS FROM BUSINESS OR PROFESSION** **16 Hrs**

Meaning and Definition of Business, Profession – Vocation - Expenses Expressly Allowed – Allowable Losses – Expenses Expressly Disallowed – Expenses Allowed on Payment Basis - Problems on Business relating to Sole Trader and Problems on Profession relating to Chartered Accountant, Advocate and Medical Practitioner.

#### **Unit 2: CAPITAL GAINS** **16 Hrs**

Basis of Charge – Capital Assets – Transfer of Capital Assets – Computation of Capital Gains – Exemptions U/S 54, 54B, 54D, 54EC, 54F– Problems on Capital Gains.

#### **Unit 3: INCOME FROM OTHER SOURCES** **10 Hrs**

Incomes – Taxable under the head Other Sources – Securities – Kinds of Securities – Rules for Grossing Up – Ex-Interest Securities – Cum-Interest Securities – Bond Washing Transactions – Problems on Income from Other Sources.

#### **Unit 4: DEDUCTIONS FROM GROSS TOTAL INCOME** **06 Hrs**

Deductions u/s: 80 C, 80 CCC, 80 CCD, 80 D, 80 G, 80 GG, 80 GGA, and 80 U. (80 G & 80 GG together should not be given in one problem)

#### **Unit 5: SET-OFF & CARRY FORWARD OF LOSSES AND ASSESSMENT OF INDIVIDUALS** **08Hrs**

Meaning –Provision for Set-off & Carry forward of losses (Theory only).

Computation of Total Income and Tax Liability of an Individual Assessee (Problems– in case of income from salary & house property- computed income may be given).

### SKILL DEVELOPMENT

- Table of rates of Tax deducted at source.
- Filing of IT returns of individuals.
- List of Enclosures for IT returns.

### BOOKS FOR REFERENCE

1. Dr. Vinod K. Singhania: Direct Taxes – Law and Practice, Taxmann publication.
2. B.B. Lal: Direct Taxes, Konark Publisher (P) ltd.
3. Dinakar Pagare: Law and Practice of Income Tax, Sultan Chand and sons.
4. Gaur & Narang: Income Tax, Kalyani
5. B.B. Lal: Income Tax, Central Sales Tax Law & Practice, Konark Publisher (P) Ltd.
6. Singhania: Income Tax
7. Dr. H.C Mehrothra : Income Tax, Sahitya Bhavan
8. 7 Lecturer Income Tax – VBH



## 6.4 MANAGEMENT ACCOUNTING

### OBJECTIVE

The objective of this subject is to enable the students to understand the analysis and interpretation of financial statements with a view to prepare management reports for decision-making.

### UNIT 1: INTRODUCTION TO MANAGEMENT ACCOUNTING

12 Hrs

Management Accounting: Meaning – Definition – Objectives – Nature and Scope– Role of Management Accountant – Relationship between Financial Accounting and Management Accounting, Relationship between Cost Accounting and Management Accounting.

Analysis of Financial Statements: Types of Analysis – Methods of Financial Analysis – Problems on Comparative Statement analysis – Common Size Statement analysis and Trend Analysis.

### UNIT2: RATIO ANALYSIS

14 Hrs

Meaning and Definition of Ratio, Classification of Ratios, Uses & Limitations – Meaning and types of Ratio Analysis – Calculation of Liquidity ratios, Profitability ratios and Solvency ratios.

### UNIT 3: FUND FLOW ANALYSIS

10 Hrs

Meaning and Concept of Fund – Meaning and Definition of Fund Flow Statement – Uses and Limitations of Fund Flow Statement – Differences between Cash Flow Statement and Fund Flow Statement - Procedure for preparation of Fund Flow Statement – Statement of changes in Working Capital – Statement of Funds from Operations – Statement of Sources and Applications of Funds – Problems.

### UNIT 4: CASH FLOW ANALYSIS

14 Hrs

Meaning and Definition of Cash Flow Statement – Concept of Cash and Cash Equivalents - Uses of Cash Flow Statement – Limitations of Cash Flow Statement – Provisions of Ind AS-7 (old AS 3) – Procedure for preparation of Cash Flow Statement – Cash Flow from Operating Activities – Cash Flow from Investing Activities and Cash Flow from Financing Activities – Preparation of Cash Flow Statement according to Ind AS-7 (old AS 3) (Indirect Method Only).

### UNIT 5: MANAGEMENT REPORTING

06 Hrs

Meaning of Management Reporting – Requisites of a Good Reporting System – Principles of Good Reporting System – Kinds of Reports – Drafting of Reports under different Situations.

### SKILL DEVELOPMENT

- Collection of financial statements of any one organization for two years and preparing comparative statements
- Collection of financial statements of any two organization for two years and prepare a common Size Statements
- Collect statements of an Organization and Calculate Important Accounting Ratio's
- Draft a report on any crisis in an organization.

### BOOKS FOR REFERENCE

1. Dr. S.N. Maheswari , Management Accounting
2. Sexana, Management Accounting
3. SudhindraBhat- Management Accounting
4. Dr. S.N. Goyal and Manmohan, Management Accounting
5. B.S. Raman, Management Accounting
6. Sharma and Gupta, Management Accounting
7. M Muniraju& K Ramachandra, Management Accounting
8. PN Reddy &Appanaiah, Essentials of Management Accounting.
9. J.Made Gowda - Management Accounting

## ELECTIVE GROUPS

### 1. FINANCE & ACTUARIAL STUDIES

#### **5.5 STATISTICS & MODELS**

##### **OBJECTIVES:**

To provide foundation in the aspects of statistics that is of relevance to actuarial work and in stochastic processes and survival models.

##### **Unit I DISCRETE AND CONTINUOUS DISTRIBUTION:**

**10 Hrs**

Definition and application of discrete distributions, geometric, binomial, negative binomial, Poisson and uniform of discrete distribution; Features of principal discrete and continuous distribution; Definition and application of the continuous distribution, normal, log normal, exponential, gamma, chi square, beta and uniform **Moment generating function: (MGF)** Moment generating function, cumulant generating function; simple cases of cumulants, and their uses to evaluate moments; Determination of moment generating function of random variable; Determination of cumulant moment generating function and the cumulants for random variable; Using the above variables, by expansion as a series or by differentiation as appropriate; Uses and application of the above function; Reasons for using the functions;

##### **Unit II: THE CONCEPTS OF INDEPENDENCE, RANDOM VARIABLE AND CONDITIONAL DISTRIBUTIONS:**

**10 HRS**

The use of generating functions to establish the distribution of linear combinations of independent random variables; Ascertain marginal distributions and conditional distributions from jointly distributed random variables; Definition of the probability function/density function of a marginal distribution and of a conditional distribution; Conditions under which random variables are independent; Calculation of the mean and variance of a function of two jointly distributed random variable, and the covariance and correlation coefficient between two variables; Determination of the probability function/density function of a function of independent random variables, using MGFs; Mean and variance of linear function of independent random variables;

##### **Unit III: THE CENTRAL LIMIT THEOREM**

**12 Hrs**

The concepts of random sampling, statistical inference and sampling distribution; the central limit theorem for a sequence of independent, identically distributed random variables; Application of the central limit theorem to establish normal approximations to other distributions, and to calculate probabilities; a continuity correction when using a normal approximation to a discrete distribution; Application of a continuity correction when using a normal approximation to a discrete distribution; Meaning of sample, a population and statistical inference; Definition of random sample from a distribution of a random variable; meaning of a statistic and its sampling distribution; Determination of the mean and variance of a sample mean and the mean of a sample variance in terms of the population mean, variance and sample size; Use of the basic sampling distributions for: - the sample mean where the population variance is know -the sample mean where the population variance is unknown - the sample variance for random samples from a population that follows a normal distribution.

**Unit IV: METHODS OF ESTIMATION:****12 Hrs**

The main properties of estimators, and their application, the method of moments for constructing estimators of population parameters; Application of the method of moments for constructing estimators of population parameters; The method of maximum likelihood for constructing estimators of population parameters for exact data samples; Application of the method of maximum likelihood for constructing estimators of population parameters for exact data samples; Definition of the terms: efficiency, bias, consistency and mean squared error; Calculation of the bias and mean square error of an estimator and its use to compare estimators

**Unit V: CONFIDENCE INTERVALS FOR UNKNOWN PARAMETERS****12 Hrs**

Definition of a confidence interval for an unknown parameter of a distribution based on a random sample; Calculation of a confidence interval for an unknown parameter using a given sampling distribution for example the mean and variance of a normal distribution; Calculation of confidence intervals for a binomial probability and a Poisson mean, using the normal approximation in both cases; Calculation of confidence intervals for two-sample situations involving either the normal distribution, or the normal approximation to the binomial and Poisson distributions **Testing hypotheses:** Meaning of the terms null and alternative hypotheses, simple and composite hypotheses, critical region, level of significance and probability-value of a test; Application of basic tests for the one-sample and two-sample situations involving the normal, binomial and Poisson distributions; Application of basic test for paired data, Test to test the random sample from a hypothesis including cases where parameters are unknown

**SKILL DEVELOPMENT**

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**BOOKS FOR REFERENCE:**

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## 5.6 LONG-TERM ACTUARIAL MATHEMATICS

### OBJECTIVE:

To provide basic knowledge in the mathematical techniques which can be used to model and value cash flows dependent on death, survival, or other uncertain risks arising in pensions and life insurance; (only gross premium and gross premium reserves are covered (net premium reserves are not required)).

### Unit I: ACTUARIAL MODELING:

12 Hrs

The principles of Actuarial modelling; Reasons and techniques of using actuarial models; Benefits and limitations of modelling; Difference between a stochastic and deterministic model, Its advantages and disadvantages; Suitability of a model for any particular application; Difference between the short run and long run properties of a model; Analysis of potential output from a model and choice of model; Process of sensitivity testing of assumptions and its importance; Factors in communicating the results of the application of a model; **Stochastic Processes:** Definition of stochastic process and counting process; The general principles of stochastic processes, classification of stochastic processes, Stochastic interest rate models; Stochastic process in continuous or discrete time; continuous or a discrete state space and in mixed type; Application of mixed processes; Meaning of Markov Property in the context of a stochastic process; Concept of stochastic interest rate model and distinction between this and a deterministic model; Algebraically derivation of annual rates of return;

### Unit II: MARKOV CHAIN PROCESSES:

14 Hrs

Features of a time homogeneous Markov chain model; Calculation of the stationary distribution for a Markov chain model in simple cases; System of frequency based experience rating in terms of a Markov chain model and simple applications; Use of Markov chains as a tool for modelling; **The Markov Jump Process;** Features of a Markov Jump Process Model, definition of time homogeneous and time inhomogeneous Markov jump process models of transitions between discrete states. Definition of the Poisson process, distribution of the number of events in a given time interval; Definition of the two state survival model, sickness models and examples multiple state models in terms of Markov jump processes. Definition of the jump chain model associated with a Markov jump process model and application of the results; Markov jump processes as a tool for modelling. **The random life time survival model:** Consistency condition between the random variable representing lifetimes from different ages; Definition of the distribution and density functions of the random future lifetime, the survival function, the force of mortality or hazard rate, and their relationships; Definitions of the actuarial symbols and integral formulae; Definition of the curtate future lifetime and the probability function; Definition of the expected value and variance of the complete and curtate future lifetimes and expressions for them. Definition of the symboise and an approximate relation between them; comparison of the random lifetime survival model with the two state Markov jump process survival model

### Unit III: SIMPLE ASSURANCE AND ANNUITY CONTRACTS

10 Hrs

Simple assurance and Annuity contracts formulae for the mean and variance of the present value of payments, (assuming deterministic interest), Definition for the following terms: whole life assurance, Term assurance, Pure endowment, Endowment assurance, critical illness assurance, whole life level annuity, temporary level annuity, guaranteed level annuity, premium, Benefit(Including assurance and annuity contracts where the benefits are deferred), Definition of relevant probabilities with their select equivalents,

Determination of expressions in the form of sums for the expected present value of benefit payments under each of the above contracts, assuming that death benefits are payable at the end of the year of death and that annuity are paid annually in advance or in arrears. Simplification of these expressions into a form suitable for evaluation by table look-up or other means, Definition of the relevant symbols and their select and continuous equivalents, Application of the annuity factors for the above symbols to allow for the possibility that payments are more frequent than annual but less frequent than continuous, Different types of mortality table and their use including ways in which future improvements can be allowed for.

**Unit IV: PRACTICAL METHODS OF EVALUATING THE EXPECTED VALUES OF SIMPLE ASSURANCE AND ANNUITY CONTRACTS** **10 Hrs**

Life table functions and their select equivalents, Definition of life table probabilities, Definition of the expected values, Evaluation of the expected values by table look-up, Determination of the approximations for, and evaluation of the expected values **Gross premiums for Life insurance and annuity contracts:** Types of expenses incurred in writing a life insurance contract, Influence of inflation on the expenses, The premiums and reserves of simple insurance contracts, Calculation by using ultimate or select mortality, the premiums and reserves of simple insurance contracts, Definition of premiums for the insurance contract benefits, Calculation of premiums for the insurance contract benefits using the equivalence principle.

**Unit V: GROSS PREMIUM RESERVES** **10 Hrs**

The reasons for setting up of reserves, Prospective and retrospective reserves Definition and evaluation of prospective and retrospective reserves Calculation of gross premiums and gross premium reserves for increasing and decreasing benefits and annuities using ultimate or select mortality, Calculation of the expected present value of an annuity, premium, or benefit payable on death, which increases or decreases, Calculation of the expected present value of an annuity, premium or benefit payable on death, which increases or decreases by a constant monetary amount at various times. Calculation of premiums and reserves for contracts with premiums or benefits which increases or decreases by a constant monetary amount at various times, and benefits payable on death, Definition of with profits contract. Different types of bonus payable to with profits contracts. Calculation of premiums and reserves for with profits contracts

**SKILL DEVELOPMENT:**

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**BOOKS FOR REFERENCE:**

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## 6.5 SHORT TERM ACTUARIAL MATHEMATICS

### OBJECTIVE

To provide further knowledge in the mathematical and statistical techniques of particular relevance to non-life insurance.

### Unit I: TECHNIQUES OF DISCOUNTING EMERGING COSTS

8 Hrs

Techniques of discounting emerging costs for use in pricing, reserving, and assessing profitability, Features of a unit-linked contract, Evaluation of expected cash flows for whole life, endowment and term assurances, annuities, and unit-linked contracts, Application of a profit test to simple annual premium contracts to determine the profit vector, the net present value, and the profit margin, Method of using the profit test to price a product, and to determine non-unit reserves for unit-linked contracts

### Unit II: THE FORMS OF HETEROGENEITY

14 Hrs

The principal forms of heterogeneity within a population and the ways in which selection can occur; the factors that contribute to the variation in mortality and morbidity, (specifically: Occupation, Nutrition, Housing, Climate/ Geography, Education, Genetics;) Definition of the following forms of selection: Temporary initial selection, Class selection, Time selection, Spurious selection, Adverse selection, How selection can be expected to occur amongst individuals taking out each of the main types of life insurance contracts, or amongst members of large pension schemes, How decrements can have a selective effect, The necessity of different mortality tables for different classes of lives, The theoretical basis of the use of risk classification in life insurance, The impact of the availability of genetic information on risk classification in life insurance, The concept of a single figure index and its advantages and disadvantages for summarizing and comparing actual experience, Definition, and illustration for the use of the terms: crude mortality rate, directly standardized and indirectly standardized mortality rate, standardized mortality ratio.

### Unit III: PROBABILITIES AND MOMENTS OF LOSS DISTRIBUTION

14 Hrs

Probabilities and Moments of loss distribution both with and without limits and risk-sharing arrangements, The properties of the statistical distributions which are suitable for modelling individual and aggregate losses, Estimation of the parameters of a failure time or loss distribution when the data is complete, or when it is incomplete, using maximum likelihood and the method of moments, Application of the principles of statistical inference to select suitable loss distributions for sets of claims Definition of moments and moment generating functions of loss distributions including the gamma, exponential, Pareto, generalised Pareto, normal, lognormal and Weibull distributions, The concepts of excesses (deductibles), and retention limits, The operation of simple forms of proportional and excess of loss reinsurance, Calculation of the moments of the claim amounts paid by the insurer and the reinsurer in the presence of excesses and reinsurance

### Unit IV: RISK MODELS

10 Hrs

Risk models involving frequency and severity distributions, Determination of models appropriate for short term insurance contracts in terms of the numbers of claims and the amounts of individual claims, The major simplifying assumptions underlying the models, Deriving the moment generating function of the sum of  $N$  independent random variables; in particular when  $N$  has a binomial, Poisson, geometric or negative binomial distribution, Definition of a compound Poisson distribution and apply the fact that the sum of independent random variables each having a compound Poisson distribution also has a compound Poisson distribution, Calculation of the mean and variance for compound binomial, compound Poisson and compound negative binomial random variables and derive the

coefficient of skewness for the compound Poisson case and make a comment on the sign of the skewness in the other case,

**Unit V:**

**10 Hrs**

Derive formulae for the moment generating functions and moments of aggregate claims over a given time period for the models in terms of the corresponding functions for the distributions of claim numbers and claim amounts, stating the mathematical assumptions underlying these formulae, Calculation of the mean and variance for compound binomial, compound Poisson and compound negative binomial random variables for both the insurer and the reinsurer after the operation of simple forms of proportional and excess of loss reinsurance and derive the coefficient of skewness for the compound Poisson case and make a comment on the sign of the skewness in the other case.

**SKILL DEVELOPMENT**

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**BOOKS FOR REFERENCE**

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## 6.6 MODELS AND AUDIT TRAILS

### OBJECTIVE

To ensure that the successful candidate can model data, including

#### Unit I: RUIN

10 Hrs

Meaning of the aggregate claim process and the surplus process for a risk, Calculation of probabilities of the number of events in a given time Interval and waiting times using the Poisson process and the distribution of inter-event times to probabilities, Calculation by using the Poisson process and distribution of inter-event times, probabilities involving waiting times and the number of events in a given time interval.

#### Unit II ADJUSTMENT CO EFFICIENT

14 Hrs

Definition and calculation of the adjustment coefficient for a compound Poisson process in simple cases, Definition of the probability of ruin in infinite/finite and continuous/discrete time, Relationships between the different probabilities of ruin, Lundberg's inequality, The significance of the adjustment coefficient in Lundberg's inequality, The effect on the probability of ruin, in both finite and infinite time, of changing parameter values, The effect on the adjustment coefficient and on the probability of ruin of simple reinsurance arrangements.

#### Unit III: TECHNIQUES FOR ANALYZING A RUN-OFF (OR DELAY)

16 Hrs

Techniques for analysing a run-off (or delay) triangle and projecting the ultimate position, Use of a statistical model to underpin a run-off triangles approach, Definition of a development factor, Use of a set of assumed development factors to project the future development of a run-off triangle, Application of the basic chain ladder method for completing the run-off triangle, Adjustment of the basic chain ladder method to make explicit allowance for inflation, Alternative ways for deriving development factors appropriate for completing the run-off triangle, Application of average cost per claim method for estimating outstanding claim amounts, Application of the Bornhuetter-Ferguson methods for estimating outstanding claim amounts, The assumptions underlying the chain ladder, average cost per claim.

#### UNIT IV: DEVELOPMENT OF SPREAD SHEET MODEL

16 Hrs

Development of a spreadsheet model to solve a specified problem; summarizing data using appropriate descriptive statistics and graphical representation, Performing checks on the data and results, Production of an audit trail, documenting: the parameters given in the scenario, the methods used in the model, checks made on the data and results

### SKILL DEVELOPMENT

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### BOOKS FOR REFERENCE

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