

Karnataka State Higher Education Council

BANGALORE UNIVERSITY

DEPARTMENT OF COMMERCE Scheme of Teaching & Evaluation and Curriculum for the 5th and 6th Semester B. Com Insurance and Actuarial Studies for the Academic Year 2023-24(NEP - 2020)



A. Scheme of Teaching & Evaluation for B.Com.

	Semester V							
	B.Com							
S1. No.	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L+T+ P)	SEE	CIE	Total Marks	Credits
1	B.COM IAS 5.1	Financial Management	DSC-13	3+0+2	60	40	100	4
2	B.COM IAS 5.2	Income Tax Law andPractice-I	DSC-14	3+0+2	60	40	100	4
3	B.COM IAS 5.3	Professional Ethics & Business Awareness	DSC-15	3+0+2	60	40	100	4
4	B.COM IAS 5.4	Risk Modelling & Survival Analysis - I	DSE-1	4+0+0	60	40	100	3
5	B.COM IAS 5.5	Financial Engineering –	DSE-2	4+0+0	60	40	100	3
6	B.COM IAS 5.6	Treasury Management	Vocational- 1	3+0+2	60	40	100	3
7	B.COM IAS 5.7	Cyber Security/ Employability skills	SEC - SB	2+0+2	60	40	100	3
	Sub -Total (D)				420	280	700	24

NOTE:

- 1. Course contents of DSE & vocational courses increases by 10-20% accordingly, work load increase from 3 Hrs to 4 Hrs (3+0+2), 3 Hrs- lecture, 0 Hrs- tutorial and 2 Hrs- practical equals to 1 Hr theory, however, credit will remain the same (3). It has been approved by BOS.
- 2. Employability skills should be taught by commerce faculty and it has been approved by BOS.

	Semester VI B.Com I & A S							
S1. No.	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	SEE	CIE	Total Marks	Credits
1	B.COM IAS 6.1	Advanced Financial Management	DSC-16	3+0+2	60	40	100	4
2	B.COM IAS 6.2	Income Tax Law and Practice-II	DSC-17	3+0+2	60	40	100	4
3	B.COM IAS 6.3	Life Insurance and Pensions	DSC-18	3+0+2	60	40	100	4
4	B.COM IAS 6.4	Risk Modelling and Survival Analysis - II	DSE-3	4+0+0	60	40	100	3
5	B.COM IAS 6.5	Financial Engineering - II	DSE-4	4+0+0	60	40	100	3
6	B.COM IAS 6.6	Business Models and Communication	Vocation al -2	3+0+2	60	40	100	3
7	B.COM IAS 6.7	Internship	I-1	4 to 5 week s	Report- 60 Marks Viva Voce - 40 Marks		100	3
	Sub -Total (D)			460	240	700	24	

Note:

- 1. Course contents of DSE increase by 20% accordingly work load increase from 3 Hrs to 4 Hrs(3+0+2), 3 Hrs lecture, 0 Hrs tutorial and 2 Hrs practical equals to 1 Hr theory however credit remain the same (3). It has been approved by BOS.
- 2. Employability skills should be taught by commerce faculty and it has been approved by BOS.

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS .5.1 (DSC-13)

Name of the Course: Financial Management

Name of the Coarse: I manetar Management				
Course	No. of Hours per	Total No. of Teaching Hours		
Credits	Week			
4 Credits	4 Hrs	60 Hrs		

Pedagogy: Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar & fieldwork etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Understand the role of financial managers effectively in an organization.
- b) Apply the compounding & discounting techniques for time value of money.
- c) Take investment decision with appropriate capital budgeting techniques for investment proposals.
- d) Understand the factors influencing the capital structure of an organization.
- e) Estimate the working capital requirement for the smooth running of the business

Syllabus:	Hours
Module No. 1: Introduction to Financial Management	12

Introduction -Meaning of Finance, Finance Function, Objectives of Finance function, Organization of Finance function -Meaning and definition of Financial Management; Goals of Financial Management, Scope of Financial Management, Functions of Financial Management, Role of Finance manager in India- Financial planning- Steps in financial Planning - Principles of a sound financial plan and Factors affecting financial plan, Financial analyst-Role of Financial analyst.

Module No. 2: Time Value of Money

10

Introduction – Meaning of time value of money-time preference of money- Techniques of timevalue of money: Compounding Technique-Future value of Single flow, Multiple flow and Annuity

-Discounting Technique-Present value of Single flow, Multiple flow – and Annuity. Doubling Period- Rule 69 and 72.

Module No. 3: Financing Decision

14

Introduction-Meaning and Definition of Capital Structure, Factors determining the CapitalStructure, Concept of Optimum Capital Structure, EBIT-EPS Analysis- Problems. Leverages: Meaning and Definition, Types of Leverages- Operating Leverage, Financial Leverageand Combined Leverages. Problems.

Module No. 4: Investment Decision

12

Introduction-Meaning and Definition of Capital Budgeting, Features, Significance – Steps in Capital Budgeting Process. Techniques of Capital budgeting: Traditional Methods – Pay Back Period, and Accounting Rate of Return – DCF Methods: Net Present Value-Internal Rate of Return and Profitability Index- Problems.

Module 5: Working Capital Management

12

Introduction- Meaning and Definition, types of working capital, Operating cycle, Determinants of working capital needs – Estimation of working capital requirements - problems. Sources of working capital, Cash Management, Receivable Management, and Inventory Management (Concepts only).

Skill Development Activities:

- 1. Visit the Finance Department of any organization and collect and record the Functions and Responsibilities of Finance Manager.
- 2. As a finance manager of a company advice the management in designing an appropriateCapital Structure.
- 3. Evaluate a capital investment proposal by using NPV method with imaginary figures.
- 4. Illustrate with imaginary figures the compounding and discounting techniques of timevalue of money.
- 5. Estimate working capital requirements of an organization with imaginary figures.
- 6. Any other activities, which are relevant to the course.

Books for reference:

- 1. I M Pandey, Financial management, Vikas publications, New Delhi.
- 2. Abrish Guptha, Financial management, Pearson.
- 3. Khan & Jain, Basic Financial Management, TMH, New Delhi.
- 4. S N Maheshwari, Principles of Financial Management, Sulthan Chand & Sons, New Delhi.
- 5. Chandra & Chandra D Bose, Fundamentals of Financial Management, PHI, New Delhi.
- 6. B.Mariyappa, Financial Management, Himalaya Publishing House, New Delhi.
- 7. Ravi M Kishore, Financial Management, Taxman Publications
- 8. Prasanna Chandra, Financial Management, Theory and Practice, Tata McGraw Hill.
- 9. Moneycontrol.com

Note: Latest edition of books may be used.

Name of the Program: Bachelor of Commerce INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 5.2 (DSC-14)

Name of the Course: Income Tax Law and Practice - I

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar & fieldwork etc.,

Course Outcomes: On successful completion of the course, the students will be able to

- a) Understanding the legal framework.
- b) Understand the provisions for determining the residential status & Incidence of tax of anIndividual.
- c) Comprehend the of assessment of salary income
- d) Understand and assessment of taxable house property income.
- e) Comprehend TDS, advances tax Ruling & deductions under section 80C to 80U.

Syllabus:	Hours
Module No. 1: Basic Concepts of Income Tax	

Introduction –Meaning of tax-, types of taxes, cannons of taxation. Brief history of Indian Income Tax, legal framework of taxation, Important definitions, assessment, assessment year, previous year including exceptions, assesses, person, income, casual income, Gross total income, Total income, Agricultural income, scheme of taxation, – Exempted incomes of individuals under

section 10 of the Income Tax Act, 1961 (concept only). Slab rate- Under Old tax and new tax regime 115BAC

Module No. 2: Residential Status and Incidence of Tax

10

Introduction – Residential status of an individual. Determination of residential status of an individual. Incidence of tax or Scope of Total income. Problems on computation of Gross totalIncome of an individual.

Module No. 3: Income from Salary

18

Introduction - Meaning of Salary -Basis of charge, Definitions–Salary, Perquisites and profits in lieu of salary - Provident Fund –Transferred balance. Retirement Benefits – Gratuity, pension and Leave salary. Deductions u/s 16 and Problems on Computation of Income from Salary.

Module No. 4: Income from House Property

10

Introduction - Basis for charge - Deemed owners -House property: incomes exempt from tax,composite rent and unrealized rent. Annual Value -Determination of Annual Value

- Deductions u/s 24 from Annual Value - Problems on Computation of Income from House Property.

Module No. 5: Tax Deduction at Sources & Advance Tax Ruling

10

Introduction – TDS Sec 192, Advance Tax: Meaning of advance tax - Computation of advance tax - Instalment of advance tax and due dates. **Deductions** under Sections 80C, 80CCC, 80CCD, 80CCG, 80DD, 80DD, 80DDB, 80E, 80G, 80GG, 80TTA and 80U as applicable to Individuals.

Skill Developments Activities:

- 1. Prepare a slab rates chart for different Individual assesses.
- 2. Collect and record the procedure involved in filing the Income tax returns of an Individual.
- 3. List out exempted incomes under section 10 of an Individual as per IT Act 1961.
- 4. Prepare the chart of perquisites received by an employee in an organization.
- 5. List out required documents for filling returns of an Individual.
- 6. Any other activities, which are relevant to the course.

Books for Reference:

- 1. Mehrotra H.C and T.S.Goyal, Direct taxes, Sahithya Bhavan Publication, Agra.
- 2. Vinod K. Singhania, Direct Taxes, Taxman Publication Private Ltd, New Delhi.
- 3. Gaur and Narang, Law and practice of Income Tax, Kalyani Publications, Ludhiana.
- 4. Bhagawathi Prasad, Direct Taxes.
- 5. B.Mariyappa, Income tax Law and Practice-I, Himalaya Publishing House. New Delhi.s
- 6. Dr. Saha, Law and Practice of Income Tax, Himalaya Publishing House.
- 7. Income tax department website www.incometax.gov.in

Note: Latest edition of text books may be used.

INSURANCE AND ACTUARIAL SCIENCE

Course Code: B.COM IAS 5.3 (DSC-15)

Name of the Course: PROFESSIONAL ETHICS AND BUSINESS AWARENESS

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

Pedagogy: Classrooms lecture, Case studies, Group discussion, Seminar & field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) What is professional ethics and its importance to actuarial profession
- b) Actuarial functions in an insurance/reinsurance environment
- c) How to act with integrity in a difficult situation
- d) Business environment awareness
- e) Different possible dilemmas which actuaries may encounter

e) Different possible dilemmas which actuaries may encounter			
Syllabus:	Hours		
Module No. 1: Professional Ethics	10		
Professional Ethics			
What is Professional Ethics - It's importance to any profession - How related to) Actuarial		
professional and why actuarial bodies focus seriously on these aspects			
Module No. 2: Dilemma's - Pick scenarios (Professional CPD videos) from			
IFOA website			
Your professional responsibilities - Possible Dilemma's in an actuarial role - I	Discuss on		
how as an actuary we will be able to handle them - Discuss four scenarios from differen			
actuarial capacities and understand the importance of handling dilemma's better.			
Module No. 3: Business Environment	12		
Understanding a business environment - How to financial companies create value to			
customers Financial Service industry (any one country) - External and Internal factors			

customers- - Financial Service industry (any one country) - External and Internal factors impacting financial environment - Strategic thinking in business - Relevant legal principles (any one country)

Module No. 4: Actuarial Functions

13

Different functions in an Insurance/Reinsurance company - Actuarial predominate functions (ex: Pricing, Valuation, Risk management etc) - Purpose of different actuarial functions - Roles and responsibilities of actuaries in actuarial functions.

Module 5: Case Studies	13
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Case Studies based on Module No. 4 and Module No. 5

Skill Development Activities:

- 1. Chart of Professional Ethics
- 2. Understanding the Professional CPD videos
- 3. Components of Business Environment.
- 4. Identification of Financial Environment
- 5. Organogram of Insurance Company
- 6. Role and Responsibilities of Actuaries

Books for Reference:

- 1. Working Ethics How to be fair in culturally complex world Richard Rowson
- 2. Insurance Business Environment & Insurance Company Operations K.C. Mishra
- 3. IFOA website on professional dilemma videos as base for discussion.

Note: Latest edition of books may be used.

Name of the Programme: Bachelor of Commerce (B.Com) INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 5.4 (DSE-1)

Name of the Course: RISK MODELLING & SURVIVAL ANALYSIS-I

Course Credits	No. of Hours per Week	Total No of Teaching Hours
3 Credits	4 Hrs	60 Hrs

Pedagogy: Lectures in the Classroom, Reading and analysis of annual reports of listed companies; writing assignment, seminar presentation, group discussion.

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Describe and apply Markov chains and processes
- b) Understand the Kolmogorov equations and its relevance in survival analysis
- c) Appreciate the various mortality models in the industry
- d) Differentiate between the Markov chain and jump processes
- e) Describe and apply techniques of survival analysis

Syllabus	Hours
Module No. 1 - Stochastic processes	08

Stochastic Processes - Definition, types, stationary process, and weakly stationary process, Understanding deterministic and stochastic models.

Module No. 2 - Markov chain

07

Markov Property, Markov chains, model for no claim discount policy, stationary distributions, irreducible markov chains and periodic markov chains, modelling using markov chains and checking the goodness of fit for a markov process.

Module No. 3 - The two state markov model and the Poisson model

15

Understanding the two state model and extending the concept to multiple state model, use of Poisson model in understanding mortality estimation. In this chapter we consider a formulation of the problem in which we analyse the random process by which a life passes from one state (alive) to another (dead). The results are consistent with those that we obtain when we model a person's future lifetime as a continuous random variable.

Module No. 3 - Time homogenous and time inhomogenous markov process

15

State the essential features of a Markov process model. Define a Poisson process, derive the distribution of the number of events in a given time interval, derive the distribution of inter-event times, and apply these results. 3Derive the Kolmogorov equations for a Markov process with time independent and time/age dependent transition intensities. Solve the Kolmogorov equations in simple cases. Describe simple survival models, sickness models and marriage models in terms of Markov processes and describe other simple applications. Derive maximum likelihood estimators for transition intensities. Describe an observational plan in respect of a finite number of individuals observed during a finite period of time, and define the resulting statistics, including the waiting times.

Module No. 5: Survival Models and estimating life time distributions

15

Understanding the various assumptions in developing models, UDD, CFM and Balducci assumptions, extending the life time distributions, Gompertz Makeham model and humped hazard models and other relevant areas.

Books for Reference:

- 1. Question papers from www.actuariesindia.org
- 2. Fsa Dick London, Survival Models and their estimation. Actex, 1997.
- **3.** Newton L. Bowers, Actuarial Mathematics. The society of Actuaries, 1986.
- 4. Question papers and examiner's report from Institute and faculty of actuaries, UK
- **5.** ZdzislawBrzezniak and Tomasz Zastawniak, Basic stochastic processes: A course through exercises. Springer, 2000.
- 6. J. Medhi, Stochastic Processes, John Wiley, 1994.
- **7.** GrimmettGeoffery and David Stizaker, Probability and random processes. Oxford University press, 2001

Note: Latest edition of books may be used

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 5.5 (DSE-2)

Name of the Course: FINANCIAL ENGINEERING - I

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
3 Credits	4 Hrs	60
		Hrs

Pedagogy: Classrooms lecture, Case studies, Group discussion, Seminar & field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Gain an understanding Efficient market hypothesis, utility theorem and its applications.
- b) Understand the ways of measuring investment risk and importance of portfolio theory.
- c) Understand the application of models of asset returns including CAPM.
- d) Understand the concept of stochastic calculus including the application of Brownian motion and diffusion processes.

e) Understand the application of stochastic modeling for interest rates.

Syllabus:	Hours
Module No. 1: Introduction to Financial Engineering	20

Introduction to financial engineering, economic models, economic vs statistical models, General modeling principles, Efficient market hypothesis (EMH), Three forms of EMH, Active vs Passive Investment Strategies, over reactions, under reactions, anomalies, utility theory – consumer choice and preferences, the expected utility theorem, certainty equivalence, risk seeking and risk averse investor, Measuring risk aversion, the log utility function and power utility function, Limitations of utility theory, maximizing utility through insurance, Stochastic dominance, first order and second order stochastic dominance, relationship between dominance concepts and utility theory. Behavioral finance.

Module No. 2: Measures of Investment Risk and Portfolio Theory

10

Measures of Investment risk- variance, semi variance, shortfall probabilities, Value at Risk (VaR), Tail VaR, using insurance to manage risk, stochastic models for investment return- fixed rate and varying rate model, modern portfolio theory – Mean variance portfolio theory, opportunity set, efficient frontier, benefits of diversification.

Module No. 3: Models of Asset returns and Asset Pricing Models

15

Models of asset returns – multifactor models, macro-economic models, fundamental factor models, statistical factor models. Asset pricing models – CAPM, the separation theorem, Capital Market line (CML), Security Market Line (SML), Beta, zero beta model, arbitrage pricing theory.

Module No. 4: Brownian motion

08

Product differentiation, integrals for simple integrands, properties of the integral, integrals for general integrands, Brownian motion – properties, standard and geometric Brownian motion, non-differentiability of sample paths, martingales – discrete and continuous.

Module No. 5: Stochastic Process

07

Stochastic calculus and Ito processes, Ito process for random numbers, stochastic differential equations, Diffusion and Ito process, The Ornstein Uhlenbeck process.

Books for Reference:

- 1. Financial economics: with applications to investments, insurance and pensions. Panjer, H. H. (ed) The Actuarial Foundation, 2001
- 2. Introduction to mathematical portfolio theory. Joshi, Mark S.; Paterson, Jane M. Cambridge University Press, 2013
- 3. Modern portfolio theory and investment analysis. 9th ed. Elton, E. J.; Gruber, M. J.; Brown, S. J. et al. John Wiley, 2014
- 4. David K. H. Begg, Stanley Fisher and RudigerDornbusch, Economics. McGraw-hill, 2002.

Note: Latest edition of books may be used.

Name of the Program: Bachelor of Commerce (B.Com.) INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 5.6 (VOCATIONAL – 1) **Name of the Course: TREASURY MANAGEMENT**

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
3 Credits	(3+0+2) 4 Hrs	60
		Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar& field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) To identify the treasury management process from inception to end.
- b) To define the various banking service categories
- c) To prepare a basic cash flow forecast using the moving average method forecasting technique.
- d) To recognize the types of collection methods available and to recall the types of collection strategies.
- e) To recognize how the use of electronic banking services optimizes disbursements

Syllabus:	Hours
Module No. 1: Introduction	12

Introduction to Corporate Treasury Management - Overview of Corporate Treasury Management, need and benefits, functions and Treasury exposures. Organisation structure of treasury

Module No. 2: Treasury Products

12

Treasury Products - Treasury products for foreign exchange (forex) markets and forex derivatives. Commodity market instruments

Module No.3 RBI & FOREX

12

RBI and the Foreign Exchange Market - Crucial role of our country's central bank i.e. Reserve Bank of India (RBI) in forex management. Development of forex market in India is delineated, capital account convertibility, and Foreign Exchange Management Act (FEMA) is introduced.

Module No.4: Liquidity Planning and Managing Cash Assets

12

Liquidity Planning and Managing Cash Assets - Introduction of treasury management – liquidity –planning and control of liquidity CMS or cash management systems (both domestic and international), role of working capital management in liquidity

Module No. 5: Integrated Treasury

12

Integrated Treasury – Introduction, responsibilities of Treasury. Accounting risks associated with financial reporting and disclosure of treasury exposures in the balance sheet.

Books for Reference:

- 1. Treasury Management Dr.V.A.Avadhani- Himalaya Publishing House; Third Edition edition (2010)
- 2. Treasury, Investment and Risk Management- INDIAN INSTITUTE OF BANKING & FINANCE Taxmann Publications Pvt. Ltd.; edition (2017).

Note: Latest edition of text books may be used.

VI SEMESTER

Name of the Program: Bachelor of Commerce (B.Com.)-INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.1 (DSC-16)

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar& field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Understand and determine the overall cost of capital.
- b) Comprehend the different advanced capital budgeting techniques.
- c) Understand the importance of dividend decisions.
- d) Evaluate mergers and acquisition.
- e) Understand the ethical and governance issues in financial management.

Syllabus:	Hours
Module No. 1: Cost of Capital and Capital Structure Theories	14

Cost of Capital: Meaning and Definition – Significance of Cost of Capital – Types of Capital – Computation of Cost of Capital – Specific Cost – Cost of Debt – Cost of Preference Share Capital – Cost of Equity Share Capital – Weighted Average Cost of Capital – Problems.

Theories of capital structures: The Net Income Approach, The Net Operating Income Approach, Traditional Approach and MM Hypothesis – Problems.

Module No. 2: Risk Analysis in Capital Budgeting

14

Risk Analysis – Types of Risks – Risk and Uncertainty – Techniques of Measuring Risks – Risk adjusted Discount Rate Approach – Certainty Equivalent Approach – Sensitivity Analysis -Probability Approach - Standard Deviation and Co-efficient of Variation – Decision Tree Analysis Problems. .

Module No. 3: Dividend Decision and Theories

14

Introduction - Dividend Decisions: Meaning - Types of Dividends - Types of Dividends Polices - Significance of Stable Dividend Policy - Determinants of Dividend Policy; Dividend Theories: Theories of Relevance - Walter's Model and Gordon's Model and Theory of Irrelevance - The Miller-Modigliani (MM) Hypothesis - Problems.

Module No. 4: Mergers and Acquisitions

10

Meaning - Reasons - Types of Combinations - Types of Merger - Motives and Benefits of Merger - Financial Evaluation of a Merger - Merger Negotiations - Leverage buyout, Management Buyout Meaning and Significance of P/E Ratio. Problems on Exchange Ratios based on Assets Approach, Earnings Approach and Market Value Approach and Impact of Merger on EPS, Market Price and Market capitalization.

Module No. 5: Ethical and Governance Issues

08

Introduction to Ethical and Governance Issues: Fundamental Principles, Ethical Issues in Financial Management, Agency Relationship, Transaction Cost Theory, Governance Structures and Policies, Social and Environmental Issues, Purpose and Content of an Integrated Report.

Skill Development Activities:

- 1. Visit an organization in your town and collect data about the financial objectives.
- 2. Compute the specific cost and Weighted average cost of capital of an Organization, youhave visited.
- 3. Case analysis of some live merger reported in business magazines.
- 4. Meet the financial manager of any company, discuss ethical issues in financial management.
- 5. Collect the data relating to dividend policies practices by any two companies.

Books for Reference:

- 1. I M Pandey, Financial management, Vikas publications, New Delhi.
- 2. Abrish Guptha, Financial management, Pearson.
- 3. Khan & Jain, Basic Financial Management, TMH, New Delhi.
- 4. S N Maheshwari, Principles of Financial Management, Sulthan Chand & Sons, New Delhi.
- 5. Chandra & Chandra D Bose, Fundamentals of Financial Management, PHI, New Delhi.
- B.Mariyappa, Advanced Financial Management, Himalaya Publishing House, New Delhi.
- 7. Ravi M Kishore, Financial Management, Taxman Publications
- 8. Prasanna Chandra, Financial Management, Theory and Practice, Tata McGraw Hill.
- 9. Moneycontrol.com

Note: Latest edition of text books may be used

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.2 (DSC-17)

Name of the Course: Income Tax Law & Practice - II

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60
		Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar &field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Understand the procedure for computation of income from business and Profession.
- b) Understand the provisions of capital gains.
- c) Comprehend the sources of income under the income from other source.
- d) Demonstrate the computation of total income of an Individual.
- e) Comprehend the assessment procedure and to know the power of income taxauthorities.

Syllabus:	Hours
Module No. 1: Profits and Gains of Business and Profession	20

Introduction-Meaning and definition of Business, Profession and Vocation. - Expenses Expressly allowed - Expenses Expressly Disallowed - Allowable losses - Expressly disallowed expenses and losses, Expenses allowed on payment basis. Problems on computation of income from business of a sole trading concern - Problems on computation of income from profession: Medical Practitioner - Advocate and Chartered Accountants.

Module No. 2: Capital Gains

10

Introduction - Basis for charge - Capital Assets - Types of capital assets - Transfer - Computation of capital gains - Short term capital gain and Long term capital gain - Exemptionsunder section 54, 54B, 54EC, 54D, 54F, and 54G. Problems covering the above sections.

Module No. 3: Income from other Sources

10

Introduction - Incomes taxable under Head income other sources - Securities - Types of Securities - Rules for Grossing up. Ex-interest and cum-interest securities. Bond Washing Transactions - Computation of Income from other Sources.

Module No. 4: Set Off and Carry Forward of Losses & Assessment of individuals.

10

Introduction – Provisions of Set off and Carry Forward of Losses (Theory only) - Computation of Total Income and tax liability of an Individual under old tax regime and new tax regime 115BAC

Module No. 5: Assessment Procedure and Income Tax Authorities:

10

Introduction - Due date of filing returns, Filing of returns by different assesses, E- filing of returns, Types of Assessment, Permanent Account Number -Meaning, Procedure for obtaining PAN and transactions were quoting of PAN is compulsory. Income Tax Authorities their Powers and duties.

Skill Development activities:

- 1. Visit any chartered accountant office and identify the procedure involved in the computation of income from profession.
- 2. List out the different types of capital assets and identify the procedure involved in the computation of tax for the same.
- 3. List out the steps involved in the computation of income tax from other sources and critically examine the same.
- 4. Identify the Due date for filing the returns and rate of taxes applicable forindividuals.
- 5. Draw an organization chart of Income Tax department.

Books for Reference:

- 1. Mehrotra H.C and T.S.Goyal, Direct taxes, Sahithya Bhavan Publication, Agra.
- 2. Vinod K. Singhania, Direct Taxes, Taxman Publication Private Ltd, NewDelhi
- 3. Gaur and Narang, Law and practice of Income Tax, Kalyani Publicat Ludhiana.
- 4. Bhagawathi Prasad, Direct Taxes.
- 5. B.Mariyappa, Income tax Law and Practice-II, Himalaya Publishing House. Delhi.s
- 6. Dr. Saha, Law and Practice of Income Tax, Himalaya Publishing House.
- 7. Income tax department website: www.incometax.gov.in

Note: Latest edition of text books may be used.

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.3 (DSC-18)
Name of the Course: LIFE INSURANCE AND PENSIONS

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar& field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Gain an understanding of the different underlying principles of insurance and their applications.
- b) Know the different types of products developed in individual and group insurance
- c) Develop a good understanding about the different risk management tools in life insurance and the role of actuaries towards the same.
- d) Understand the different types of products used in individual and group pension schemes.
- e) Develop a good understanding of the underlying mechanics of group gratuity and group superannuation schemes.

Syllabus:	Hours
Module No. 1: Introduction to Insurance	15

Introduction and Overview - Definition of risk and categories of risks, insurable risks, types of insurance, risk management and objectives. Key insurance concepts - Concept and role of insurance, fundamental principles, indemnity, insurable interest, subrogation, utmost good faith, contract conditions. Differences between life and non-life contracts, need for regulation and the role of the regulator in the insurance business, professionals in the insurance business-need for professionalism, intermediaries in the insurance contract. IRDA regulations on Actuaries, Financial planning - Needs analysis, life cycle planning, asset allocation and taxation.

Module No. 2: Life Insurance Basics and Underwriting 15

Introduction to Life insurance contracts - Contract conditions and requirements. Types of life insurance products - term life insurance, whole life insurance, endowment policies, unit linked insurance plans and other related products. Riders to a life insurance policy - waiver of premium riders, disability benefit riders, accelerated benefit riders, how a rider works and the advantages of riders. Life insurance policy provisions - incontestability provision, grace period provision, reinstatement provision, operation of free look-in period etc. Life insurance policy beneficiaries - naming a beneficiary, change of beneficiary and related concepts. Factors determining the calculation of premium - understanding mortality. Life insurance underwriting: Life insurance underwriting - Need for risk classification and grouping of risks, agents' role in underwriting, underwriting policy, process of underwriting and restrictions on post-selection underwriting. Documents and premium - Underwriting and actuarial framework. Methods of funding life insurance - Life insurance reserves. Channels of distribution, lapse and surrenders and its impact on insurance business. Reinsurance- need for reinsurance, types of reinsurance, treaty and facultative, proportionate and non-proportionate reinsurance.

Module No. 3: Introduction to Group Insurance

15

Different types of group insurance schemes. Group term Insurance: Group OYRTA Plans, Employers Deposit Linked Insurance Scheme (EDLI), mortgage cover, graded cover, etc. Different types of groups and their characteristics from insurance point of view, benefits provided, group underwriting for employer-employee and other groups, premium rating, Expected claims cost, premium calculation for different group schemes, experience ratingits rationale and methods, prospective and retrospective rating. Group term products- UPR and IBNR Reserve, calculation of UPR and IBNR reserves for Group term policies. Social insurance programs in India.

Module No. 4: Pension Schemes

08

Need for pension, role of government in providing pensions, Employee Provident Fund, Employee Pension Scheme 1995, occupational pension schemes, individual personal pension plans, installation and operation of employer run pension schemes, defined contribution and defined pension plans, associated risks to employer and employees,, insurer administer and self-administered pension schemes, exempt superannuation scheme, income tax act and rules, investment norms for self-administered pension schemes, insurer administered pension schemes, National Pensions Scheme, PFRDA and its regulatory aspects. Payment of gratuity act, installation and administration of a gratuity scheme, nature of gratuity liability, exempt gratuity scheme, income tax act and rules, insurance company administered and self-administered gratuity schemes, investment norms for self-administered gratuity schemes, insurer administered gratuity schemes- unit linked, variable insurance plans.

Module No. 5 Group Gratuity Schemes

07

Payment of gratuity act, installation and administration of a gratuity scheme, nature of gratuity liability, exempt gratuity scheme, income tax act and rules, insurance company administered and self-administered gratuity schemes, investment norms for self-administered gratuity schemes, insurer administered gratuity schemes- unit linked, variable insurance plans.

Books for Reference:

- 1. Kenneth Black and Harold D. Skipper, Life and Health Insurance. Pearson Education publication, 1999.
- 2. Emmett. J. Vaughan and Therese Vaughan, Fundamentals of risk and insurance. Wiley publications, 2011.
- 3. M.J.Mathews, Insurance-Principles and Practices.
- 4. Principles of Insurance: A publication of the Insurance Institute of India.
- 5. IC 83: A publication of the Insurance Institute of India.
- 6. Practice of Life Insurance : A publication of the Insurance Institute of India Note: Latest edition of text books may be used.

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.4 (DSE-3) Name of the Course: RISK MODELLING AND SURVIVAL ANALYSIS – II

Course	No. of Hours per	Total No of Teaching
Credits	Week	Hours
3 Credits	4 Hrs	60
		Hrs

Pedagogy: Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar & fieldwork etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Understand and appreciate the concept of exposed to risk
- b) Understand the various mortality models and its limitations
- c) Understand the Cox regression model
- d) Understand the various methods of graduation and testing the graduated rates
- e) Appreciate the concept of mortality projections

Syllabus	Hours
Module-1 Survival models, Proportional hazards and Cox model	15

Distribution of future lifetime, force of mortality, rates of mortality, expectations of life, estimating the lifetime distribution function using the Kaplan-Meier and Nelson-Aalen models.

Cox regression model

Parametric models for the hazard function, covariates, form of Cox model. Proportional hazard model, estimating regression parameters, partial likelihood estimates.

Module No. 2 Exposed to Risk

15

Meaning of central exposed to risk and initial exposed to risk, understanding rate interval, calendar/policy/life year rate intervals, calculations involving exposed to risk under different circumstances, principle of correspondence, age definitions, measuring constant force of mortality.

Module No. 3 Methods of Graduation and Graduation Tests-I

08

Introduction, graduation of observed mortality rates, the underlying assumptions, comparison with other tables, standard tables graduation, the need for graduation, reasons for graduation, the theoretical argument, the practical Argument, features of a graduation, smooth graduation, testing the smoothness of a graduation, problems on Chi-Square test, standardized deviations test, signs test, cumulative deviations, grouping of sign test, serial corrections tests.

Module No. 4 Methods of Graduation and Graduation Tests-II

07

Methods of Graduation: Graduation by Parametric Formula, the graduation process, graphical graduation, the graphical graduation process, comparison of different methods, graduation by parametric formula, graduation by reference to a standard table, Statistical tests of a graduation, testing a graduation and effect of duplicate policies.

Module No. 5 Mortality Projections

15

Describe the approaches to the forecasting of future mortality rates based on extrapolation, explanation and expectation, and their advantages and disadvantages.

Describe the Lee-Carter, age-period-cohort, and p-spline regression models for forecasting mortality.

Books for Reference:

- 1. Newton L. Bowers, Actuarial Mathematics. The society of Actuaries, 1986.
- 2. Fsa Dick London, Survival Models and their estimation. Actex, 1997.
- 3. Question papers from www.actuariesindia.org
- **4.** Zdzislaw Brzezniak and Tomasz Zastawniak, Basic stochastic processes: A course through exercises. Springer, 2000.
- **5.** Grimmett Geoffery and David Stizaker, Probability and random processes. Oxford University press, 2001.
- 6. J. Medhi, Stochastic Processes, John Wiley, 1994.

Note: Latest edition of text books may be used

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.5 (DSE-4)

Name of the Course: FINANCIAL ENGINEERING - II

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
3 Credits	4 Hrs	60
		Hrs

Pedagogy: Classrooms lecture, Case studies, Group discussion, Seminar & field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) Understand and price the various derivative instruments in the market.
- b) Appreciate the Black Scholes model and its relevance to option pricing.
- c) Understand the concept of credit risk and its relevance in today's context
- d) Understand the probability of ruin and estimate the loss in case of a ruin
- e) Understand the concept of run off triangles in the context of general insurance

Syllabus:	Hours	
Module No. 1: Introduction to derivatives	15	

Understand derivatives. Introduction to the binomial model, understanding the various Greeks and developing strategies for delta and gamma hedging portfolios. Planning portfolio management through appropriate hedging strategies

Module No. 2: Black Scholes model

15

Assumptions underlying the Black Scholes model, Understand BS model for calculating the option prices, The 5 step methods for Garman Kohlhagen formula, use the model in the discrete and continuous time for valuing derivatives, understand how the BS model can be extended to become the Merton model for valuing credit derivatives

Module No. 3: Term structure of interest rates and credit risk

15

Understand the concept of term structure of interest, The Vasicek Model, CIR Model, Hull and White model, Limitations of the models, credit events and recovery rates, modelling credit risk – structural models, reduced form models and intensity based models. Measuring credit risk.

Module No. 4: Run off triangles

08

Explain the concept of ruin for a model, probability of ruin in discrete and continuous time, probability of ultimate ruin, Lundberg inequality, the surplus process and the adjustment coefficient..

Module No. 5: run off triangles

07

Run off triangles using basic chain ladder approach, inflation adjusted chain ladder, average cost per claim approach and the Bornhuetter Ferguson approach, relevance of run off triangles for short term insurance contracts.

Books for Reference:

- 1. Newton L. Bowers, Actuarial Mathematics. The society of Actuaries, 1986.
- 2. Options, futures and other derivatives, John. C.Hull, Pearson publishing
- 3. Question papers and examiner's report from Institute and faculty of actuaries, UK
- 4. Modern portfolio theory and investment analysis. 9th ed. Elton, E. J.; Gruber, M. J.; Brown,
 - S. J. et al. John Wiley, 2014

Note: Latest edition of text books may be used.

INSURANCE AND ACTUARIAL STUDIES

Course Code: B.COM IAS 6.6 - VOCATIONAL- 2

Name of the Course: BUSINESS MODELS AND COMMUNICATION

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
3 Credits	(3+0+2) 4 Hrs	60 Hrs

Pedagogy: Classrooms lecture, Case studies, Group discussion, Seminar & field work etc.,

Course Outcomes: On successful completion of the course, the students' will be able to

- a) What is a model and need for a model in actuarial world
- b) Construct an actuarial model to solve a realistic problem.
- c) Document the model by constructing an audit trail
- d) To identify appropriate forms of written communication
- e) Develop communication skills in terms of dealing with non-actuarial stakeholder. Identify key issues and communicate them in a effective way.

Syllabus:	Hours
Module No. 1: Data Preparation	15

Cleaning, restructuring and transforming data for analysis - Validation/Checks - Statistical tests of reasonableness - Repair corrupt/missing data making appropriate assumptions - Summarize, Descriptive statistics and graphical representation - Plan and produce a spreadsheet model to solve a specified problem (Structuring and checks).

Module No. 2: Model Audit trail and Analysis

15

Audit trail of the model with key assumptions, methodology adopted, reasonableness checks, sensitivities and limitations - Producing Audit Trail - Analyzing model outputs and interpretation of results - Appropriate visualizations - Possible next steps.

Module No. 3: Content and Effective structure

15

Forms of communication - Identify key information - Accessing necessary/not necessary information - Making information appropriate for intended recipients - Adopting appropriate language and explanation.

Module No. 4: Communication tools and practice

10

Set out information using effective communication tools - Visual/diagram/bullet points etc- Justify choice of communication tools - Practice scenarios for non-specialist audience and evaluate against ideal communication.

Module No. 5: Business Models and Communication – Case Studies	05
Case Studies on Models of Business and Communication	

Books for Reference

- 1. Spreadsheet check and control: 47 key practices to detect and prevent errors
- 2. Mastering financial mathematics in Microsoft Excel: a practical guide for business calculations
- 3. Effective business communication Herta Murphy

Note: Latest Editions of the books to be referred

Name of the Program: Bachelor of Commerce (IAS) Course Code: B.Com IAS 5.7 - SEC SKILL ENHANCEMENT COURSE Course Title Cyber Security (Theory) Formative Assessment=40 Summative =60 Course Code: SEC No. of Credits 03

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

- CO1: After completion of this course, students would be able to understand the concept of Cyber security and issues and challenges associated with it.
- CO2: Students, at the end of this course, should be able to understand the cybercrimes, their nature, legal remedies and as to how report the crimes through available platforms and procedures.
- CO3: On completion of this course, students should be able to appreciate various privacy and security concerns on online social media and understand the reporting procedure of inappropriate content, underlying legal aspects and best practices for the use of Social media platforms.

plationis.		
Contents 45 Hrs		
Module-I. Introduction to Cyber security: Defining Cyberspace and Overview of Computer and		
Web-technology, Architecture of cyberspace, Communication and web technology, Internet	, 15	
World wide web, Advent of internet, Internet infrastructure for data transfer and governance,		
Internet society, Regulation of cyberspace, Concept of cyber security, Issues and challenges of	f	
cyber security.		
Module-II .Cyber crime and Cyber law: Classification of cyber crimes, Common cyber crimes	- 15	
cyber crime targeting computers and mobiles, cyber crime against women and children	·,	
financial frauds, social engineering attacks, malware and ransomware attacks, zero day and	1	
zero click attacks, Cybercriminals modus-operandi, Reporting of cyber crimes, Remedial and	1	
mitigation measures, Legal perspective of cyber crime, IT Act 2000		
and its amendments, Cybercrime and offences, Organizations dealing with Cybercrime and	1	
Cyber security in India, Case studies.		
Module III. Social Media Overview and Security: Introduction to Social networks. Types of	f	
Social media, Social media platforms, Social media monitoring, Hashtag, Viral content, Social	1 15	
media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social	1 1	
network, Security issues related to social media, Flagging and reporting of inappropriate	9	
content, Laws regarding posting of inappropriate content, Best practices for the use of Social	1	

Pedagogy: Problem Solving

media, Case studies.

Formative Assessment for Theory			
Assessment Occasion/type	Marks		
Internal Test 2Nos	(30%40) 2=24		
Assignment/Surprise Test=2 Nos	(20%40) 2=16		
Total	40 Marks		
Formative Assessment as per guidelines.			

Cyber Crime Impact in the New Millennium, by R. C Mishra, Auther Press. Edition 2010
2 Cythou Cogusity I Indougton ding Cythou Cuimog Computou Equanciae and Local Dougnostives by Cymit
Och an Country I Indonestanding Cylon Crimas Computer Forencies and I agal Doron estimas by Cumit
2 Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit
Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
3 Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver,
Create Space Independent Publishing Platform. (Pearson, 13th November, 2001)
4 Cyber Laws: Intellectual Property & E-Commerce Security by Kumar K, Dominant Publishers.
5 Fundamentals of Network Security by E. Maiwald, McGraw Hill.

Name of the Program: Bachelor of Commerce (IAS) Course Code: B.COM IAS 5.7 - SEC SKILL ENHANCEMENT COURSE					
Course Title	EMPLOY A	ABILITY S	KILLS		
Course Code	SEC		No of Credits	3	
Formative Assessr	nent Marks	40	Summative Assessment marks	60	

Learning Objective: This course is designed to suit the need of the outgoing students to face various competitive examinations and campus interviews by acquaint them with quantitative aptitude, logical reasoning and analytical reasoning.

Course Outcomes: On successful completion of the course, the students' will be able to: **a)** Understand the basic concepts of quantitative ability

- b) Understand the basic concepts of logical reasoning skill
- c) Understand the basic concept of analytical ability
- d) Acquire satisfactory competency in the use of reasoning.
- e) Able to solve placement and competitive examination papers covering Quantitative Ability, Logical Reasoning and Analytical Reasoning Ability.

Contents	45 Hrs	
UNIT-1: Quantitative Ability	20	
1.1 Number System, 1.2 LCM and HCF, 1.3 Decimal fraction 1.4 Square roots & Cube roots,		
1.5 Surds, and Indices, 1.6 Averages 1.7 Percentages 1.8 Problems on Ages 1.9 Profit and Loss,		
1.10 Simple and Compound Interest 1.11 Ratio and Proportion 1.12 Probability 1.13 Time and		
Work, 1.14 Time, Speed and Distance, 1.15 Permutation and Combination		
UNIT-2: Logical Reasoning (Deductive Reasoning)		
2.1 Analogy 2.2 Coding and Decoding, 2.3 Blood Relations, 2.4 Directional Sense 2.5 Number and		
Letter Series 2.6 calendars 2.7 clocks 2.8 Venn Diagram 2.9 Seating Arrangements 2.10		
Mathematical operations		
UNIT-3: Analytical Reasoning	13	
3.1 Statement and Arguments 3.2 Statements and Assumptions 3.3 Statements and Conclusion		
3.4 Passage and conclusion 3.5 Assertion and Reason 3.6 Cause and Effects 3.7 Simple and Coded		
inequality 3.8 Conditions and Grouping 3.9 Critical Reasoning, 3.10 Syllogism,		

Reference books

- 1. A Modern Approach To Verbal and Non Verbal Reasoning by R S Agarwal
- 2. Analytical and Logical reasoning By Sijiwali BS
- 3. Quantitative aptitude for Competitive examination by R S Agarwal
- 4. Analytical and Logical reasoning for CAT and other management entrance test by Sijiwal BS
- 5. Quantitative aptitude for competitive examinations by Abhijit Guha 4th edition
- 6. https://prepinsta.com
- 7. https://www.indiabix.com
- 8. https://www.javatpoint.com
- 9. Handbook on "Employability Skills" by Karnataka State Higher Education Council and Karnataka Skill Development Corporation (Download from Bangalore university website)

Guidelines for Internship Bachelor of Commerce Insurance and Actuarial Science

1. Objectives:

- a) The internship aims at enabling the students to get a practical exposure to the working/functioning of the Insurance industry.
- b) The internship provides an opportunity to students to substantiate their classroom learning with practical experience.

2. Guidelines for Internship:

- 1) Students of the V Semester, after completion of the End Semester Examination have to undergo the internship for a minimum of 4- 6 weeks (min 160 hours). The area of Internship can be only in the fields of Insurance and Actuarial Studies: (anywhere in India or abroad).
- 2) On completion of the internship, a certificate from the company is to be obtained stating the period of the internship and a brief description of the nature of the internship i.e. responsibilities handled. Also, the Confidential rating on various parameters (1-6) (Like Regularity to work, Attitude towards work, Professional Competence, Ability to interact with other staff/colleagues, Willingness to learn etc.) has to be obtained from the Company.
- 3) A report of internship undertaken along with certificate and confidential rating will have to be submit to the Department of the concerned College.

3. The Internship Report should include FIVE (5) chapters

Chapter-1 Introduction of the organization includes - Inception, SWOC analysis, nature of business, profile, Organizational Structure, Functional Areas, etc

Chapter – 2 objective of study, methodology adopted-source of data -technique, limitation of the study etc

Chapter -3 Discussion/Analysis and Interpretation/Findings of the study, and suggestions

Chapter-4 Learning Experience like Work profile and job responsibilities handled by the studentsduring internship, their contribution and learning experience. Weekly report of work done etc.

Chapter - 5 Conclusion

4. Evaluation of the Report:

Internship Report shall be valued by Examiners of BOE for 60 Marks and the viva voce shall be conducted by the BOE for 40 marks and the marks shall be added in the VI Semester. (Total marks = Report (60 marks) + Viva Voce (40 marks) = 100 Marks).

5. Presentation of the Report:

- 1. Typing should be done on one side of the A-4 size paper.
- 2. The margin left side 1.75 inches, the right, top and bottom margin should be 1 inch each.
- 3. Font size: Chapter heading: 14; Sub-heading: 12 (Bold) and text of the running matter: 12.
- 4. Fonts to be used are Times New Roman.
- 5. The text of the report should have 1.5 line spacing; quotations and foot notes should be in single-line space
- 6. The total of the report to be in the range of 85 to 100 pages
- 7. The report should be presented in hardbound/ Spiral (Normal binding) for reportevaluation
- 8. The students shall also submit the hard & PDF Soft copy of the report to the HOD, Department of Commerce, Concerned College should keep the record in library
- 9. In case of any doubt or ambiguity in the interpretation of the guidelines mentioned in the guidelines, the decision of the Dean, Faculty of Commerce, shall be final.