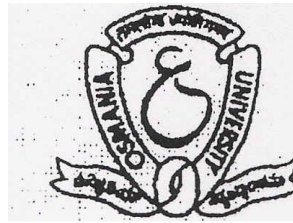


B.Com (Computer Applications)

(w.e.f. 2016–2017)

Second Year Syllabus (CBCS)



**FACULTY OF COMMERCE, OSMANIA UNIVERSITY
HYDERABAD - 500 007 T.S.**

2017

DEPARTMENT OF COMMERCE, O.U.

*Structure of B.Com (Computer Application) (CBCS) for Osmania University, Hyderabad.
(w.e.f. Academic Year 2016-17)*

DEPARTMENT OF COMMERCE, O.U.

*Structure of B.Com (Computer Application) (CBCS) for Osmania University, Hyderabad.
(w.e.f. Academic Year 2016-17)*

B.COM (Computer Applications) PROGRAMME**FIRST YEAR:****SEMESTER-I**

Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		Total		31	30

SEMESTER-II

8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BC207	Relational Database Management Systems	DSE-4B	3T+2P	4
		Total		31	30

SECOND YEAR:**SEMESTER-III**

15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BC307	Programming with C	DSC-4C	3T+2P	4
		Total		31	30

SEMESTER-IV

22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BC407	Objective Oriented Programming with C++	DSC-4D	3T+2P	4
		Total		31	30

THIRD YEAR:**SEMESTER-V**

29.	BC501	Practice of General Insurance	SEC-3	2	2
30.	BC502		GE-1	2	2
31.	BC503	Cost Accounting	DSC-1E	4	4
32.	BC504	Business Law	DSC-2E	4	4
33.	BC505	Banking Theory & Practice	DSC-3E	4	4
34.	BC506	Computerised Accounting	DSC-4E	3T+2P	4
35.	BC507	Elective – I	DSE-1A	4T+2P	5
36.	BC508	Elective – II	DSE-2A	4T+2P	5
		Total		33	30

SEMESTER-VI

37.	BC601	Regulation of Insurance Business	SEC-4	2	2
38.	BC602		GE-2	2	2
39.	BC603	Managerial Accounting	DSC-1F	4	4
40.	BC604	Company Law	DSC-2F	4	4
41.	BC605	Financial Institutions & Markets	DSC-3F	4	4
42.	BC606	Commerce Lab	DSC-4F	2T+4P	4
43.	BC607	Elective – I	DSE-1B	5	5
44.	BC608	Elective - II	DSE-2B	5	5
		Total		32	30
		GRAND TOTAL		189	180

AECC: Ability Enhancement Compulsory Course; **SEC:** Skill Enhancement Course; **DSC:** Discipline Specific Course; **DSE:** Discipline Specific Elective; **GE:** Generic Elective; **T=Theory;** **P=Practicals;**

SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AECC	2	2	4
2	SEC	4	2	8
3	CC Language	8	5	40
	DSC	8	5	40
		16	4	64
4	DSE	4	5	20
5	GE	2	2	4
	TOTAL	44		180
	Commerce Total	28		124

Paper : (BC 304) : ADVANCED ACCOUNTING

Paper:BC 304

PPW: 5 Hrs

Credits : 5

Max. Marks: 100

Exam Duration: 3 Hrs

Objective: To acquire accounting knowledge of partnership firms and joint stock companies

UNIT-I: PARTNERSHIP ACCOUNTS-I:

Meaning – Partnership Deed - Capital Accounts (Fixed and Fluctuating) – Admission of a Partner – Retirement and Death of a Partner (Excluding Joint Life Policy)(Including problems)

UNIT-II: PARTNERSHIP ACCOUNTS–II:

Dissolution of Partnership – Insolvency of a Partner (excluding Insolvency of all partners) – Sale to a Company(Including problems)

UNIT-III: ISSUE OF SHARES, DEBENTURES, UNDERWRITING AND BONUS

SHARES:

Issue of Shares at par, premium and discount - Prorata allotment – Forfeiture and Re-issue of Shares – Issue of Debentures with Conditions of Redemption – Underwriting:Meaning – Conditions- Bonus Shares: Meaning – SEBI Guidelines for Issue of Bonus Shares – Accounting of Bonus Shares(Including problems)

UNIT-IV: COMPANY FINAL ACCOUNTS AND PROFIT PRIOR TO INCORPORATION:

Companies Act 2013: Structure – General Instructions for preparation of Balance Sheet and Statement of Profit and Loss – Part-I: Form of Balance Sheet – Part-II: Statement of Profit and Loss – Preparation of Final Accounts of Companies - Profits Prior to Incorporation- Accounting treatment. (Including problems)

UNIT-V: VALUATION OF GOODWILL AND SHARES:

Valuation of Goodwill: Need – Methods: Average Profits, Super Profits and Capitalization Methods -Valuation of Shares: Need –Net Assets, Yield and Fair Value Methods. (Including problems)

SUGGESTED READINGS:

1. Principles and Practice of Accounting: R.L. Gupta & V.K. Gupta, Sultan Chand & Sons.
2. Advanced Accountancy: Shukla and Grewal, S.Chand & Co.
3. Advanced Accountancy: R.L.Gupta&Radhaswamy, Sultan Chand & Sons.
4. Advanced Accountancy (Vol-II): S.N.Maheshwari&V.L.Maheswari, Vikas.
5. Accountancy–III: Tulasian, Tata McGraw Hill Co.
6. Advanced Accountancy: Arulanandam; Himalaya.
7. Accountancy–III: S.P. Jain & K.L Narang, Kalyani Publishers.
8. Guidance Note on the Revised Schedule VI to the Companies Act, 1956, The Institute of Chartered Accounts of India.
9. Advanced Accounting (IPCC): D. G. Sharma, Tax Mann Publications.

Paper : (BC 305) : INCOME TAX – I

Paper: BC 305

PPW: 5 Hrs

Credits : 5

Max. Marks: 100

Exam Duration: 3Hrs

***Objective:** To acquire conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assessee.*

UNIT-I: INTRODUCTION:

Direct and Indirect Taxes – Canons of Taxation - Features and History of Income Tax in India – Definitions and Basic Concepts of Income Tax: Assessee – Deemed Assessee – Assessee-in-default – Assessment Year – Previous Year - Income Tax general rule and Exemptions to the Rule– Person – Income – Gross Total Income – Total Income — Incomes Exempt from Tax. Residential Status and Scope of Total Income: Meaning of Residential Status – Conditions applicable to an Individual Assessee – Incidence of Tax – Types of Incomes – Problems on computation of Total Income of an Individual based on Residential Status.

UNIT-II: AGRICULTURAL INCOME:

Introduction – Definition – Tests to determine Agricultural Income – Partly Agricultural and partly Non-Agricultural Income – Integration: conditions – provisions – computation of Tax on Integration process. Heads of income: Gross Total Income – Taxable Income – Income Tax Rates.

UNIT-III: INCOME FROM SALARIES:

Definition of ‘Salary’ – Characteristics of Salary – Computation of Salary Income: Salary u/s 17(1) – Annual Accretion – Allowances – Perquisites – Profits in lieu of Salary – Deductions u/s. 16 – Problems on computation of Income from Salary.

UNIT-IV: INCOME FROM HOUSE PROPERTY:

Definition of ‘House Property’ – Exempted House Property incomes– Annual Value – Determination of Annual Value for Let-out House and Self-occupied House – Deductions u/s.24 – Problems on computation of Income from House Property.

UNIT-V: PROFITS AND GAINS OF BUSINESS OR PROFESSION:

Definition of ‘Business and Profession’ – Procedure for computation of Income from Business – Rules – Revenue and Capital nature of Incomes and Expenses – Allowable Expenses u/s. 30 to 37 – Expenses expressly disallowed – Deemed Profits – Valuation of Stock – Miscellaneous provisions u/s 44. Depreciation: Meaning – Conditions for charge of depreciation – Assets used for Business – Block of Assets – Rates of Depreciation – Miscellaneous Provisions about depreciation – Computation of Depreciation –problems on computation of Income from Business.Income from Profession: Rules– procedure – problems on computation of Income from Profession.

SUGGESTED READINGS:

1. Income Tax Law and Practice: V.P. Gaur & D.B Narang, Kalyani Publishers.
2. Direct Taxes Law & Practice: Dr. Vinod K. Singhania & Dr. Kapil Singhania, Taxmann
3. Income Tax: B.B. Lal, Pearson Education.
4. Taxation: R.G. Saha, Himalaya Publishing House Pvt. Ltd.
5. Income Tax: Johar, McGrawHill Education.
6. Taxation Law and Practice: Balachandran & Thothadri, PHI Learning.

Paper : (BC 306) : BUSINESS STATISTICS-I

Paper: BC 306

PPW: 4Hrs

Credits : 4

Max. Marks: 100

Exam Duration: 3hrs

Objective : *To inculcate analytical and computational ability among the students.*

UNIT-I: INTRODUCTION:

Origin and Development of Statistics – Definition - Importance and Scope - Limitations of Statistics - Distrust of Statistics.

Statistical Investigation: Planning of statistical investigation - Census and Sampling methods - Collection of primary and secondary data - Statistical errors and approximation - classification and Tabulation of data - Frequency distribution.

UNIT – II: DIAGRAMMATIC AND GRAPHIC PRESENTATION:

Diagrammatic presentation: One Dimensional and Two Dimensional Diagrams – Pictograms – Cartograms Graphic presentation: Technique of Construction of Graphs - Graphs of Frequency Distribution - Graphs of Time Series or Histograms.

UNIT-III: MEASURES OF CENTRAL TENDENCY:

Introduction –Significance -Arithmetic Mean- Geometric Mean - Harmonic Mean - Mode – Median - Quartiles and Percentiles - Simple and Weighted Averages - Uses and Limitations of different Averages.

UNIT-IV: MEASURES OF DISPERSION, SKEWNESS AND KURTOSIS:

Measures of Dispersion: Significance - Characteristics - Absolute and Relative Measures - Range - Quartile Deviation - Mean Deviation- Standard Deviation - Coefficient of Variation.

Measures of Skewness - Karl Pearson's Coefficient of Skewness - Bowley's Coefficient of Skewness - Kelly's Measure of Skewness – Kurtosis: Mesokurtosis, Platy kurtosis and Leptokurtosis.

UNIT-V: CORRELATION:

Meaning -Types - Correlation and Causation – Methods: Scatter Diagram - Karl Person's Coefficient of Correlation - Probable Error and Interpretation of Coefficient of Correlation - Rank Correlation - Concurrent Deviation Method.

SUGGESTED READINGS:

1. Statistics for Management: Levin & Rubin, Pearson
2. Fundamentals of Statistics: Gupta S.C, Himalaya
3. Statistics: E. Narayanan Nadar, PHI Learning
4. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
5. Business Statistics: K. Alagar, Tata McGraw Hill
6. Fundamentals of Statistical: S. P Gupta, Sultan Chand
7. Business Statistics: J. K. Sharma, Vikas Publishers
8. Business Statistics: S. L Aggarwal, S. L. Bhardwaj, Kalyani Publications
9. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
10. Statistics - Theory, Methods and Applications: Sancheti D.C. & Kapoor V.K
11. Business Statistics: S. K. Chakravarty, New Age International Publishers
12. Statistics: Andasn,Sweenly,Williams,Cingage.

Paper: (BC 307): PROGRAMMING WITH C

Paper: BC 307
PPW: 4 (3T+2P)

Max. Marks: 70T + 30P
Exam Duration: 3 Hrs.

Credits : 4

Objective s: *To gain the skills of Structured (Procedural/Functional) Programming using C Language.*

UNIT-I: INTRODUCTION TO C LANGUAGE, DATA TYPES AND I/O OPERATIONS:

Introduction: Types of Languages – History of C language – Basic Structure – Creating – Compiling - Linking and Executing the C Program - Pre-processors in “C”.

Types and I/O operations: Keywords & Identifiers – Constants – Variables - Scope and Life of a Variable - Data types - Storage classes - Reading a character or values - Writing a character or value - Formatted Input and Output operations.

UNIT-II: OPERATORS, EXPRESSIONS AND DECISION MAKING:

Operators: Introduction – Arithmetic – Relational – Logical – Assignment - Conditional - Special operators – Expressions: Arithmetic – Evaluation - Type conversions.

Decision Making & Looping: Introduction - If statements - If-else statements - Switch statements - Conditional statements - While statements - Do statements - For Statements.

UNIT-III: ARRAYS AND STRINGS:

Arrays: Introduction - Defining an array - Initializing an array - One dimensional array – Two dimensional array - Dynamic array.

Strings: Introduction - Declaring and initializing string variables - Reading and Writing strings - String handling functions.

UNIT-IV: BUILT-IN FUNCTIONS AND USER-DEFINED FUNCTIONS:

Built-in functions: Mathematical functions - String functions - Character functions - Date functions. User defined functions: Introduction - Need for user defined functions - Elements of functions - Return values and their types - Function declaration - Function calls - Recursive functions.

UNIT-V: STRUCTURES AND POINTERS:

Structures: Introduction - Declaring structures variables - Accessing structure members - Functions and Structures - Array of structures - Enumerated Data types - Introduction to Unions.

Pointers: Fundamentals - Understanding pointers - Address - Declaration of Pointers.

LAB: PROGRAMS USING C.

SUGGESTED READINGS:

1. Programming in ANSCI C: Balaguruswamy, McGraw Hill.
2. Programming in C: Ashok Kamthane, Pearson.
3. C How to Program: P.J. Deitel & H.M. Deitel, Pearson & PHI.
4. Programming in C: K.S. Kahlon, Kalyani Publishers.
5. Fundamental of C: Dr. N. Guruprasad, Himalaya Publishing House.
6. C: Learning and Building Business and System Applications: Susant Rout, PHI.
7. Mastering C: K.R. Venugopal, McGraw Hill.
8. Programming in C: J.B. Dixit, Firewal Media.
9. The C Programming Language: B.W.Kernighan & D.M.Ritehie, PHI.
10. C: The Complete Reference: H.Schildt, McGraw Hill.
11. Let Us C: Y.Kanetkar, BPB.
12. C++ Spoken Tutorials by IIT Bombay

Paper : (BC 401) : PRACTICE OF LIFE INSURANCE

Paper: BC 401

Max. Marks: 100

PPW: 2 Hrs; Credits : 2

Exam Duration: 3 Hrs

Objectives: The objectives of the course are : 1) to provide an insight into the different types of Life Insurance Plans. 2) enable the students to understand the importance of Nomination and Assignments 3) give an Overview of Policy Claims

UNIT I: PRACTICE AND PLANS OF LIFE INSURANCE : a) **Practice of Life Insurance:** Overview of the Indian Insurance Market – Growth of Insurance Business in India – Organizational Structure of LIC – Postal Life Insurance – Organizational Structure of Postal Life Insurance – Appointment of Life Insurance Agents and their Functions – Need of an Agent in Life Insurance Selling – Appointment of Agents – Remuneration to Agents – Trends in Life Insurance Distribution Channels. b) **Plans of Life Insurance:** Types of Life Insurance Plans – Term Plan – Endowment Plan – Money Back Insurance Plan – Whole Life Insurance Plan – Unit Linked Insurance Plans (ULIPs) – Joint Life Insurance Plans – Child Insurance Plans – Rider Benefits – Industrial Life Insurance – MWP Policies – Keyman Insurance – Health Insurance and its types

UNIT II: PREMIUMS, BONUSSES AND ANNUITIES : a) **Premiums & Bonus:** Concept of Premium – Types of Premium – Factors considered in calculating Premium – Premium Calculations - Surrender Value and Non-forfeiture Options – Revival of Lapsed Policies and its Types – Revival of Postal Life Insurance Policies - Bonus in Policies –Types of Bonus in Life Insurance Policies. b) **Annuities:** Understand Concept of Annuity – Types of Annuity Plans – Advantages and Disadvantages of Annuity – Annuity Vs. Life Insurance – Terminology in Annuity

UNIT III: GROUP INSURANCE AND LINKED LIFE INSURANCE POLICIES : a) **Group Insurance:** Importance of Group Insurance Schemes – Features of Group Insurance Schemes – Eligibility Conditions in Group Insurance – Types of Group Insurance Schemes – Group Term Insurance Scheme – Group Gratuity Scheme – Group Superannuation Scheme – Types of Group Superannuation Schemes – Group Leave Encashment Scheme – Employees Deposit – Linked Insurance Scheme – Group Insurance Scheme in Lieu of EDLI – Social Security Scheme. b) **Linked Life Insurance Policies :** Concept of Unit Linked Policies – ULIP Premium and its Break-up – Types of Funds in ULIPS – Traditional Plans Vs. ULIPS – Working Mechanism – Top-up and NAV – Features of ULIPS – Revival of ULIPS – IRDA Guidelines on ULIPS

UNIT IV: POLICY DOCUMENTS AND ASSIGNMENT, NOMINATION & SURRENDER OF POLICY : a) **Policy Documents:** Life Insurance Policy Application and Process – Proposal Form and Related Documents - Importance of a Policy Document – Format of a Policy Document – Policy Schedule and its Various Components – Conditions and Privileges in a Policy Document – Duplicate Policies. b) **Assignment, Nomination & Surrender of Policy:** Assignment of Life Insurance Policies – Conditional Assignment – Absolute Assignment – Process of Assignment – Nomination – Process of Nomination – Features of Nomination – Assignment Vs. Nomination – Surrender of Policies – Foreclosure of Insurance Policies

UNIT V: POLICY CLAIMS : Types of Policy Claims – Survival Benefits – Death Claims – Maturity Claims – Submission of Proof of Title at Claim Processing Stage – Early Claims and Non-early Claims – Documents required for Processing Early Claims – Death due to Un-natural Causes or Accidents – Nomination – Assignment – Waiver of Evidence of Title – Claims Concession Clause and Extended Claims Concession Clause – Presumption of Death – Insurance Riders – Accidental Death Benefit Rider – Permanent Death Benefit Rider – IRDA Regulations for Claim Payments

SUGGESTED READINGS : 1. Risk Management and Insurance: Vaughan and Vaughan., 2.) Risk Management : A Publication of the Insurance Institute of India., 3). Guide to Risk Management: Sagar Sanyal 4). Insurance and Risk Management: P.K. Gupta 5). Insurance Theory and Practice: Tripathi PHI 6). Principles of Insurance Management: Neelam C Gulati, Excel Books 7). Life and Health Insurance: Black, JR KENNETH & Harold Skipper, Pearson 8). Principles of Risk Management and Insurance: (13th Edition), George E. Ejd 9) . Risk Management and Insurance : Trieschman ,Gustavson and Hoyt 10) South Western College Publishing Cincinnati, Ohio, 10). Life Insurance: Vol I, II, III (LBRARO) : ICAFI Course Book. 11). Life and Health Insurance Handbook: Davis W.Gregg

Suggested Websites : www.irda.gov.in . 2) www.policyholder.gov.in . 3) www.irdaindia.org.in

Paper : (BC 404) : CORPORATE ACCOUNTING

Paper: BC 404

Max. Marks: 100

PPW: 4 Hrs

Exam Duration: 3 Hrs

Credits : 4

Objective: To acquire knowledge of AS-14 and preparation of accounts of banking and insurance companies.

UNIT-I: COMPANY LIQUIDATION:

Meaning – Modes - Contributory Preferential Payments – Statements of Affairs - Liquidator's Remuneration - Preparation of Liquidator's Final Statement of Account (Including problems)

UNIT-II: AMALGAMATION (AS-14):

Amalgamation: In the nature of merger and purchase – Calculation of Purchase Consideration – Accounting Treatment in the books of transferor and transferee companies. (Including problems)

UNIT-III: INTERNAL RECONSTRUCTION AND ACQUISITION OF BUSINESS:

Internal Reconstruction: Accounting treatment – Preparation of final statement after reconstruction- Acquisition of business when new set of books are opened- Debtors and Creditors taken over on behalf of vendors- When same set of books are continued(Including problems)

UNIT-IV: ACCOUNTS OF BANKING COMPANIES:

Books and Registers maintained – Slip system of posting – Rebate on Bills Discounted – Non-Performing Assets – Legal Provisions relating to final accounts - Final Accounts. (Including problems)

UNIT-V: ACCOUNTS OF INSURANCE COMPANIES AND INSURANCE CLAIMS:

Introduction – Formats-Revenue Account–Net Revenue Account - Balance Sheet - Valuation Balance Sheet – Net Surplus – General Insurance - Preparation of final accounts with special reference to Fire and Marine Insurance - Insurance claims- Meaning – Loss of Stock and Assets – Average Clause – Treatment of Abnormal Loss - Loss of Profit. (Including problems)

SUGGESTED READINGS:

1. Advanced Accountancy (Vol-II): S.N.Maheshwari&V.L.Maheswari, Vikas.
2. Accountancy–III: Tulasian, Tata McGraw Hill Co.
3. Advanced Accountancy: Arulanandam; Himalaya
4. Accountancy–III: S.P. Jain & K.L Narang, Kalyani Publishers
5. Advanced Accounting (Vol-II): Chandra Bose, PHI
6. Advanced Accountancy: Shukla and Grewal, S.Chand& Co
7. Advanced Accountancy: R.L.Gupta&Radhaswamy, Sultan Chand & Sons
8. Corporate Accounting: Sakshi Vasudeva, Himalaya.

Paper : (BC 405) : INCOME TAX – II

Paper: BC 405

PPW: 5 Hrs

Credits : 5

Max. Marks: 100

Exam Duration: 3Hrs

Objective: To acquire conceptual and legal knowledge about Income Tax provisions relating to computation of Income from different heads with reference to an Individual Assessee.

UNIT-I: CAPITAL GAINS:

Introduction - Meaning – Scope of charge – Basis of charge – Short term and Long term Capital Assets – Transfer of Capital Asset – Deemed Transfer – Transfer not regarded as Transfer – Determination of Cost of Acquisition – Procedure for computation of Long-term and Short-term Capital Gains/Losses – Exemptions in respect of certain Capital Gains u/s. 54 – Problems on computation of capital gains.

UNIT-II: INCOME FROM OTHER SOURCES:

General Incomes u/s. 56(1) – Specific Incomes u/s. 56(2) – Dividends u/s. 2(22) – Interest on Securities – Gifts received by an Individual – Casual Income – Family Pension – Rent received on let out of Furniture- Plant and Machinery with/without Building – Deductions u/s. 57 - Problems on computation on Income from Other Sources.

UNIT-III: CLUBBING AND AGGREGATION OF INCOME:

Income of other persons included in the total income of Assessee – Income from Firm and AOP – Clubbing Provisions – Deemed Incomes – Provisions of set-off and Carry forward of losses – computation of Gross Total Income – Deductions from GTI u/s 80C to 80U – Problems on Computation of Taxable Income

UNIT-IV: ASSESSMENT OF INDIVIDUALS:

Computation of Tax Liability – Applicability of Alternate Minimum Tax on Individual u/s 115JC – Problems on Computation of tax liability

UNIT-V: ASSESSMENT PROCEDURE:

Income tax returns – Types of returns – Filing of e-return – Assessment – Types of assessment – Self assessment – Provisional assessment – Regular assessment – Best judgement assessment – Reassessment – Rectification of mistakes – Notice on demand.

SUGGESTED READINGS:

1. Income Tax Law and Practice: V.P. Gaur & D.B- Narang, Kalyani Publishers.
2. Direct Taxes Law & Practice: Dr. Vinod K. Singhania & Dr. Kapil Singhania, Taxmann
3. Income Tax: B. Lal, Pearson Education.
4. Income Tax: M.Jeevarathinam & C. Vijay Vishnu Kumar, SCITECH Publications.
5. Taxation: R.G. Saha, Himalaya Publishing House Pvt. Ltd.
6. Income Tax: Johar, McGrawHill Education.
7. Taxation Law and Practice: Balachandran & Thothadri, PHI Learning

Paper : (BC 406) : BUSINESS STATISTICS-II

Paper: BC 406

Max. Marks: 100

PPW: 5Hrs

Exam Duration: 3hrs

Credit : 5

OBJECTIVE: *To inculcate analytical and computational ability among the students.*

UNIT-I: REGRESSION:

Introduction - Linear and Non Linear Regression – Correlation Vs. Regression - Lines of Regression - Derivation of Line of Regression of Y on X - Line of Regression of X on Y - Using Regression Lines for Prediction.

UNIT-II: INDEX NUMBERS:

Introduction - Uses - Types - Problems in the Construction of Index Numbers - Methods of Constructing Index Numbers - Simple and Weighted Index Number (Laspeyre - Paasche, Marshall – Edgeworth) - Tests of Consistency of Index Number: Unit Test - Time Reversal Test - Factor Reversal Test - Circular Test - Base Shifting - Splicing and Deflating of Index Numbers.

UNIT-III: TIME SERIES:

Introduction - Components – Methods-Semi Averages - Moving Averages – Least Square Method - Deseasonalisation of Data – Uses and Limitations of Time Series.

UNIT-IV: PROBABILITY:

Probability – Meaning - Experiment – Event - Mutually Exclusive Events - Collectively Exhaustive Events - Independent Events - Simple and Compound Events - Basics of Set Theory – Permutation – Combination - Approaches to Probability: Classical – Empirical – Subjective - Axiomatic - Theorems of Probability: Addition – Multiplication - Baye's Theorem.

UNIT-V: THEORETICAL DISTRIBUTIONS:

Binomial Distribution: Importance – Conditions – Constants - Fitting of Binomial Distribution. Poisson Distribution: – Importance – Conditions – Constants - Fitting of Poisson Distribution. Normal Distribution: – Importance - Central Limit Theorem - Characteristics – Fitting a Normal Distribution (Areas Method Only).

SUGGESTED READINGS:

1. Statistics for Management: Levin & Rubin, Pearson,
2. Fundamentals of Statistics: Gupta S.C, Himalaya
3. Business Statistics: Theory & Application, P. N. Jani, PHI Learning
4. Business Statistics: Dr. J. K. Thukral, Taxmann Publications
5. Business Statistics: K. Alagar, Tata Mc Graw Hill
6. Fundamentals of Statistical: S. P Gupta , Sultan Chand
7. Business Statistics: J. K. Sharma, Vikas Publishers
8. Business Statistics: Vora, Tata Mc Graw Hill
9. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
10. Statistics-Theory, Methods and Applications: Sancheti D.C. & Kapoor V.K
11. Business Statistics: S. K. Chakravarty, New Age International Publishers
12. Business Statistics-G.Laxman, Vasudeva Reddy, K.Goud, Taxmann Publications, Hyderabad.

Paper: (BC 407): OBJECT ORIENTED PROGRAMMING IN C++

Paper: BC 407
PPW: 4 (3T+2P)

Max. Marks: 70T + 30P
Exam Duration: 3 Hrs.

Credits : 4

Objective: To gain skills of Object Oriented Programming using C++ Language.

UNIT-I: INTRODUCTION:

Object Oriented Programming: Concepts – Benefits – Languages - Structured vs. Object Oriented Programming. C++: Genesis - Structure of a program – Tokens - Data Types – Operators - Control Structures - C vs C++ - Functions.

UNIT-II: CLASSES, OBJECTS, CONSTRUCTORS AND DESTRUCTORS:

Encapsulation - Hiding - Abstract data types - Object & Classes – Attributes - Methods - C++ class declaration - State identity and behaviour of an object. Purpose of Constructors - Default Constructor - Parameterized Constructors - Copy Constructor - Instantiation of objects - Default parameter value - Object types - C++ garbage collection - Dynamic memory allocation – Meta class / Abstract classes.

UNIT-III: OVERLOADING, CONVERSIONS, DERIVED CLASSES AND INHERITANCE:

Function and Operator Overloading - Overloading Unary and Binary Operators - Data and Type Conversions - Derived Classes - Concept of Reusability - Visibility modes - Types of Inheritance - Single and Multiple Inheritance - Multilevel Inheritance.

UNIT-IV: POLYMORPHISM, VIRTUAL FUNCTION, STREAMS AND FILES:

Polymorphism - Virtual - Classes - Pointer to Derived class - Virtual functions - Rules for Virtual function - Pure Virtual functions - Stream Classes - Types of I/O - Formatting Outputs - File Pointers – Buffer - C++ Stream - Unformatted console I/O operations – Functions: get() - put() – formatted console I/O operations - IOS class format functions - Manipulators.

UNIT-V: EXCEPTION HANDLING AND DATA STRUCTURES IN C++:

Exceptions in C++ Programs - Try and Catch Expressions - Exceptions with arguments. Data Structures: Introduction - Linked list - Stacks - Queues.

SUGGESTED READINGS:

1. Objected Oriented Programming with C++: E. Balagurusamy, McGraw Hill.
2. C++ Programming-A Practical Approach: Madhusudan Mothe, Pearson.
3. Object Oriented Programming Using C++: Chadha & Chadha, Kalyani.
4. Programming in C++: A. N. Kamthane, Pearson.
5. The Complete Reference C++: H. Schildt, McGraw Hill.
6. C++:How to Program: Deitel & Deitel, PHI.
7. Mastering C++: KR.Venugopal & R.Buyya, McGraw Hill.
8. Schaum's Outlines: Programming with C++: by John R Hubbard.
9. Object Oriented Programming using C++: Somashekara, PHI.
10. C++ Spoken Tutorials by IIT Bombay.
