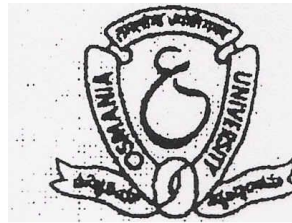


# **B.Com (Computers)**

(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 (Computers ) (CBCS) for Osmania University, Hyderabad.*  
*(w.e.f. Academic Year 2016-17)*

**DEPARTMENT OF COMMERCE, O.U.**

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

**B.COM (Computers) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I</b>					
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
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II</b>					
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	Management Information System	DSC-4B	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III</b>					
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
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-IV</b>					
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++	<b>DSE-4D</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

<b>THIRD YEAR:</b>					
<b>SEMESTER-V</b>					
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	Auditing	DSC-4E	4	4
<b>35.</b>	<b>BC507</b>	Computerised Accounting	<b>DSE-1A</b>	<b>4T+2P</b>	<b>5</b>
<b>36.</b>	<b>BC508</b>	E-Commerce	<b>DSE-2A</b>	<b>4T+2P</b>	<b>5</b>
		<b>Total</b>		<b>32</b>	<b>30</b>
<b>SEMESTER-VI</b>					
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
<b>43.</b>	<b>BC607</b>	Web Technologies	<b>DSE-1B</b>	<b>4T+2P</b>	<b>5</b>
<b>44.</b>	<b>BC608</b>	Relational Database Management Systems	<b>DSE-2B</b>	<b>4T+2P</b>	<b>5</b>
		<b>Total</b>		<b>34</b>	<b>30</b>
		<b>GRAND TOTAL</b>		<b>190</b>	<b>180</b>

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
	<b>TOTAL</b>	<b>44</b>		<b>180</b>
	<b>Commerce Total</b>	<b>28</b>		<b>124</b>

**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**

**Objectives:** *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 & Bonuses:** 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: (13<sup>th</sup> Edition), George E. Janda 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](http://www.irda.gov.in) . 2) [www.policyholder.gov.in](http://www.policyholder.gov.in) . 3) [www.irdaindia.org.in](http://www.irdaindia.org.in)



**Paper: (BC 404): CORPORATE ACCOUNTING**

Paper: BC 404

PPW: 5 Hrs

Credit : 5

Max. Marks: 100

Exam Duration: 3 Hrs

*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  
Credit :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

PPW: 4Hrs

Credit: 4

Max. Marks: 100

Exam Duration: 3hrs

**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: THEORITCAL 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-Teory, 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)  
Credits : 4

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

*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.

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