

# **M.COM (IS) (CBCS)**

*(w.e.f. 2019-'20)*



**FACULTY OF COMMERCE, OSMANIA  
UNIVERSITYHYDERABAD - 500 007 (TS)**

**2019**

**DEPARTMENT OF COMMERCE, O.U.****M.Com.(IS) COURSE STRUCTURE (CBCS)***(Applicable to the batch of students admitted in the academic year 2019-20 and onwards)***FIRST SEMESTER**

Sl. No.	Code	Title of the Paper	THP	Credits	ESED	Marks			
						IA	Assignment	End-Sem Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	MCIS 1: Core –I	Accounting Standards and Reporting	5	4	3 Hrs	15	5	80	100
2.	MCIS 2: Core –II	Financial Management	5	4	3 Hrs	15	5	80	100
3.	MCIS 3: Core –III	Organization Theory & Behavior	5	4	3 Hrs	15	5	80	100
4.	MCIS 4 : Elective – I :	Specialization **	(3T+4P) /5T	5	3 Hrs	15 IA	35 LPE	50/80	100
5.	MCIS 5 : Elective–II :	Specialization **	3T+4P	5	3 Hrs	15 IA	35 LPE	50	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>(23T+8 P)/25T</b>	<b>23</b>		<b>75</b>	<b>15 IA+ 70LPE</b>	<b>365/ 395</b>	<b>525</b>

\*25=15W+10PR

**SECOND SEMESTER**

Sl. No.	Code	Title of the Paper	THP	Credits	ESED	Marks			
						IA	Assignment	End-Sem Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6.	MCIS6: Core – I	Advanced Managerial Accounting	5	4	3 Hrs	15	5	80	100
7.	MCIS7: Core –II	Investment Management	5	4	3 Hrs	15	5	80	100
8.	MCIS8: Core –III	Human Resource Management	5	4	3 Hrs	15	5	80	100
9.	MCIS9: Elective–I :	Specialization **	(3T+4P) /5T	5	3 Hrs	15 IA	35 LPE	50/80	100
10.	MCIS10: Elective-II:	Specialization **	3T+4P	5	3 Hrs	15 IA	35 LPE	50	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>(23T+8 P)/25T</b>	<b>23</b>		<b>75</b>	<b>15 IA+ 70LPE</b>	<b>365/ 395</b>	<b>525</b>

\*25=15W+10PR

**Note:** Specialization Papers in Semesters I & II (i.e., **Operating System and E-Commerce**) will have 5 Hours of theory teaching and End Semester Exam for 80 Marks, IA for 15 Marks and Assignment for 5 Marks.

**THIRD SEMESTER**

Sl. No.	Code	Title of the Paper	THP	Credits	ESED	Marks			
						IA	Assignment	End-Sem Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11	MCIS:11 Core – I	Research Methodology & Statistical Analysis( <b>ID paper</b> )	5	4	3 Hrs	15	5	80	100
12	MCIS:12 Core – II	Marketing Management	5	4	3 Hrs	15	5	80	100
13	MCIS:13 Core –III	Cost Accounting and Control	5	4	3 Hrs	15	5	80	100
14	MCIS:14 Elective-I:	Specialization **	(3T+4P) /5T	5	3 Hrs	15 IA	35 LPE	50/ 80	100
15	MCIS:15 Elective -II	Specialization **	(3T+4P) /5T	5	3 Hrs	15 IA	35 LPE	50/ 80	100
	Seminar .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>(23T+8P)/27T</b>	<b>23</b>		<b>75</b>	<b>15 IA+70LPE</b>	<b>365/425</b>	<b>525</b>

\*25=15W+10PR

**FOURTH SEMESTER**

Sl. No.	Code	Title of the Paper	THP	Credits	ESED	Marks			
						IA	Assignment	End-Sem Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
16	MCIS:16 Core –I	ERP	5	4	3 Hrs	15	5	80	100
17	MCIS:17 Core –II	Business and Corporate Taxation	5	4	3 Hrs	15	5	80	100
18	MCIS:18 Core –III	Managerial Economics & Business Environment	5	4	3 Hrs	15	5	80	100
19	MCIS:19 Elective–I:	Specialization **	(3T+4P) /5T	5	3 Hrs	15 IA	35 LPE	50/80	100
20	MCIS:20 Elective-II:	Specialization **	3T+4P	5	3 Hrs	15 IA	35 LPE	50	100
21	MCIS: 21	Project Work	8	4	3 Hrs	-	-	50VV + 50D	100
	Seminar : .....		<b>2</b>	<b>1</b>	3 Hrs	-	-	25*	25
<b>Total</b>			<b>(31T+8P)/33T</b>	<b>27</b>		<b>75</b>	<b>15 IA+70 LPE</b>	<b>465/495</b>	<b>625</b>
<b>GRAND TOTAL</b>			<b>(100T+32P) / 110T</b>	<b>96</b>		<b>300</b>	<b>60IA+280 LPE</b>	<b>1560/1710</b>	<b>2200</b>

\*25=15W+10PR

**Note:**Specialization Papers in Semesters III & IV (i.e., **Data Communication and Networks, Cyber Laws and E-Business Management**) will have 5 Hours of theory teaching and End Semester Exam for 80 Marks, IA for 15 Marks and Assignment for 5 Marks.

Code	Title of the Paper	THP	Credits	ESED	Marks			
					IA	Assignment	End-Sem Exam	Total
ID Paper for non-Commerce	Business Organization & Management	4	4	3 Hrs	15	5	80	100

THP= Teaching Hours Per Week; ESED=End-Semester Examination Duration; VV=Viva-Voce;  
LPE = Lab Practical Examinations; D=Dissertation; T=Theory; P=Practical; W=Write-up; PR=Presentation

**\*\* AREA OF SPECIALIZATION**

Sl. No.	Specialization	Semester-I	Semester-II	Semester-III	Semester-IV
I	<b>IS – Applications &amp; Analysis</b>	(1) <b>BIS:</b> Business Information System  (2) <b>OOPs:</b> Object Oriented Programming using C++	(3) <b>E - Com :</b> E –Commerce  (4) <b>RDBMS:</b> Relational Data Base Management System	(5) <b>DCN:</b> Data Communication and Network  (6) <b>AD. EX:</b> Advanced Excel	(7) <b>BDS:</b> Business decisions using SPSS  (8) <b>WD:</b> Web Designing
II	<b>IS - Management</b>	(1) <b>OS:</b> Operating System  (2) <b>Java programming</b>	(3) <b>Acc ERP:</b> Accounting Enterprise Resource Planning  (4) <b>RDBMS :</b> Rational Data Base Management System	(5) <b>SE:</b> Software Engineering  (6) <b>Cy. Laws:</b> Cyber Laws	(7) <b>E-Business Management</b>  (8) <b>Web Designing</b>
			The allotment of THP 3T +2P; IA=15; LPE=35; EE=50; Total =100 Marks.		

**Note:**

- O,A, B, C, D, E and F grades are awarded on the basis of marks secured as per the directive given by the University.
- For each paper there will be semester examination for 80 marks and 20 marks for internal assessment [15 marks for tests (average of the two tests) and 5 marks for assignment in the subject].
- Business Organization & Management** is an inter-disciplinary paper which is offered for non-commerce students. A minor modification is made in the structure of M.Com III Semester with regard to the following:
  - In view of the approval from the administration Lr. No.1690/M/Acad.I/2017, dated:30.11.2017. Research Methodology & Statistical Analysis is marked as ID paper.
  - Earlier, the credits & marks for the ID paper BOM offered for the non-commerce students were included in the total of the III semester and was also included in the grand total which now stands rectified.

**Project Guidelines:**

- 1) The aim of the Project is to give an opportunity to students to learn independently and show that they can identify, define and analyze problems or issues and integrate knowledge in a business context. It reflects the ability of a student to understand and apply the theory, the concepts and the tools of analysis to a specific situation.
- 2) The project is a practical, in-depth study of a problem, issue, opportunity, technique or procedure or a combination of these aspects of business. The students are required to define an area of investigation, carve out research design, gather relevant data, analyze the data, draw conclusions and make recommendations. The project must be an original piece of work that will be undertaken in post-graduate study, over a period of two semesters.
- 3) The topic is to be selected carefully with the help of supervisor.
- 4) All the material that relates to your project, including completed questionnaires or tapes from interviews, should be shown to your supervisor and be kept until the examination board has confirmed your results. Do not throw this material away once your project is submitted, as you might be asked to present it as part of the Viva Voce Examination, before your project results are confirmed.
- 5) The supervisor's role is to appraise ideas and work of the student. Student must take overall responsibility for both the content of project and its management. This includes selection of an appropriate subject area (with the approval of the supervisor), setting up meetings with the supervisor, devising and keeping to a work schedule (to include contingency planning), and providing the supervisor with samples of your work.
- 6) The project reports would be examined by the external examiner and based on the report and Viva Voce examination conducted at the end of IV semester, a student will be awarded marks. Unless the marks reports reach the controller of examinations, a student will not get his degree.
- 7) The External Examiner will be appointed by the controller of examinations based on the panel of the examiners recommended by the Board of Studies in Commerce (PG), OU, Hyderabad.
- 8) The External Examiners will examine the following in Project Report:
  - a) Literature Survey on the Topic Chosen.
  - b) Method of Data Collection.
  - c) Presentation – Style, Comprehensiveness, Table presentation, Graphs, Charts.
  - d) Analysis and inference and implication of the study.
  - e) Overall linkage between objectives, methodology, findings and suggestions.
  - f) Bibliography and References.

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**SEMESTER – III****RESEARCH METHODOLOGY AND STATISTICAL ANALYSIS****PAPER CODE: MCIS 11 :Core-I****TOTAL MARKS: 80+15+05=100****PPW: 5, Credits:4****EXAM DURATION: 3 HRS**

**OBJECTIVE:** *Objective of this course is to develop research orientation among the students and develop analytical skills.*

**UNIT-I: INTRODUCTION:**

**Quantitative Techniques:** Meaning, Need and Importance - Classification: Statistical Techniques - Operations Research techniques - Role of Quantitative Techniques in Business and Industry - Quantitative Techniques in Decision making - Limitations.

**Research:** Meaning, Purpose, Characteristics and Types - Process of Research: Formulation of objectives - Formulation of Hypotheses: Types of Hypotheses - Methods of testing Hypotheses - Research plan and its components - Methods of Research: Survey, Observation, Case study, experimental, historical and comparative methods - Difficulties in Business research.

**UNIT-II: COLLECTION, PRESENTATION & ANALYSIS OF DATA:**

**Sources of Data:** Primary and Secondary Sources - Methods of collecting Primary Data - Designing Questionnaires/Schedules in functional areas like Marketing, Finance, Industrial Economics, Organizational Behavioral and Entrepreneurship (Practically students should be able to design questionnaires for given problem/cases in these areas). Census vs. Sampling - Methods of Sampling Random and Non-Random Sampling methods - Measurement and scaling techniques.

**Processing and Presentation of Data:** Editing, coding, classification, and tabulation - Graphic and diagrammatic presentation (Theory only). Statistical analysis of Data: Types of analysis (Descriptive analysis and inferential analysis) – Tools: Measures of Central Tendency, Measures of Variation, Skewness, Time series, Index numbers, Correlation and Regression (theory only).

**UNIT-III: INTERPRETATION AND REPORT WRITING:**

**Interpretation:** Introduction - Essentials for Interpretation, Precautions in interpretation - Conclusions and generalization - Methods of generalization. Statistical fallacies: bias, inconsistency in definitions, inappropriate comparisons, faulty generalizations, drawing wrong inferences, misuse of statistical tools, failure to comprehend the data. (including small cases). **Report Writing:** Meaning and types of reports - Stages in preparation of Report - Characteristics of a good report - Structure of the report'-Documentation: Footnotes and Bibliography - Checklist for the report.

**UNIT-IV: STASTICAL ESTIMATION AND HYPOTHESIS TESTING:**

**Concepts:** Population, sample and sampling distribution - Parameters and statistics - Central limit theorem - Concept of Standard Error - Confidential limits - Estimation of population parameters - Properties of a good estimator - Point and interval estimation - Hypothesis Formulation and testing procedure - Type I and Type II errors - One tail and two tail tests (Theory only).

**Sampling of Attributes:** Estimation and testing of Number and Proportions of Success - Difference between two proportions (including problems).

**UNIT-V: SAMPLING OF VARIABLE:**

**Large Samples:** Difference between large and small samples - Estimating population mean - Testing: Significance of Mean - Significance of the difference between means of two samples - Significance of the difference between the standard deviations of two samples. (including problems)

**Small Samples:** 't' test - Fixing fiducial limits to population mean – Testing: Significance of the mean - Significance of the difference between two independent means – Significance of the difference between two dependent means (including problems).

**SUGGESTED READINGS:**

1. Levin et al: Statistics for Management.,
2. Kothari: Research Methodology.,
3. Zikmund: Business Research Methods.,
4. Krishna Swamy: Methodology of Research in Social Sciences.,
5. SC. Gupta: Fundamentals of Statistics.,
6. SP. Gupta: Statistical Methods.,
6. 7. Keller: Statistics for Management & Economics.,
8. Sanchetty & Kapoor: Business Statistics.,
9. Anderson: Statistics for Business and Economics,
- Achalapathi KV: Reading in Research Methodology in Commerce & Business Management.

**MARKETING MANAGEMENT****PAPER CODE: MCIS 12 :Core-II****TOTAL MARKS: 80+15+05=100****PPW: 5, Credits:4****EXAM DURATION: 3 HRS**

**OBJECTIVE** :The course aims to develop skills in the analysis and resolution of management problems related to the marketing process; economic, psychological and sociological characteristics of demand for various products; marketing research; channels of distribution; personal selling, pricing policies and regulation of marketing.

**UNIT-I: MARKETING BASICS:**

An Overview of Marketing - Production concept - Product concept - Marketing myopia - Selling concept - Marketing Concept - Societal dimension of marketing - Importance and scope of marketing - The Role of Marketing in Economic Development - Rural Marketing - Rural Markets VS Urban Markets - Marketing Management tasks - Types of demand - Marketing mix - marketing Objectives - Marketing Planning and Strategy - Mega Marketing (Power and Public relations) - Service Marketing

**UNIT-II: TARGET MARKETING AND MARKET SEGMENTATION AND CONSUMER BEHAVIOR:**

Concept of Target market - Market segmentation - Concept - Types - Patterns - Benefits - Requirements for effective segmentation - Basis for market segmentation - market segmentation analysis for given products - Product positioning.

Concept of consumer behavior - Nature - Scope - Importance - Major factors influencing consumer behavior - Cultural - Social - Economic - Psychological & Personal - Consumer decision process - Post purchase feelings - Brand loyalty - Cognitive Dissonance - Industrial buyer behavior - Marketing Research -Steps.

**UNIT-III: PRODUCT MANAGEMENT:**

Concept of product - Classification of products - levels of product classification - Product mix and product line decisions - new Product Development Process - Product Life Cycle Stages and implication formarketers - Branding - Packaging and labelingstrategies.

**UNIT-IV: PRICE AND CHANNEL MANAGEMENT**

Role of price in marketing mix - Pricing concept - Objectives of pricing - Factors influencing price determination - New product Pricing - Market Skimming pricing - Market penetration pricing - Pricing of products and services - Pricing Methods. Nature of marketing channels - Channel Structure and participants - Types of marketing intermediaries - Importance of Channel management - Channel Design Decisions Channel conflict and resolutions - Contemporary marketing channels in India - A globalperspective.

**UNIT-V: PROMOTION MANAGEMENT**

Promotion Management - Role of promotion in marketing - Promotion mix - A view of the Communication Process - Advertising - Need - Objectives - Types of advertising - Major decisions in advertising - Objectives - Budget - Strategy - Evaluation - Advertising and Social Marketing - Sales Promotion - Objectives & Tools - Personal Selling – Nature - Role of Sales force - Publicity - PublicRelations.

**SUGGESTED READINGS:**

1. Marketing Management Analysis, Planning & Control - Philip Kotler, 9thedn.
2. Principles of Marketing – PhilipKotler.
3. Fundamentals of Marketing – W.J.Stanton.
4. Marketing Management – J.C.Gandhi.
5. Consumer Behaviour – Schiff Man, PrenticeHall.
6. Managing Services, Marketing Operations and Human Resource –Lovelock.
7. Marketing Management - Czinkota, 2/e -Thomson.
8. Marketing, Planning & Strategy - Jain,Thomson.
9. Consumer Behaviour – Assael,Thomson.
10. Bennett Anthony, The Big Book of Marketing, Tata McGrawHill
11. Marketing: Baines &Sinha: Oxford universityPress

## **COST ACCOUNTING AND CONTROL**

**PAPER CODE: MCIS 13:Core-III**  
**PPW: 5, Credits:4**

**TOTAL MARKS: 80+15+05=100**  
**EXAM DURATION: 3 HRS**

**OBJECTIVE:**To impart conceptual knowledge of cost accounting and to equip with skills of ascertainment and control of costs.

### **UNIT-I: INTRODUCTION:**

Cost Accounting: Nature and Scope, Need, Objectives– Cost Concepts – Installation of Costing System – Cost Accounting its relationship with Financial Accounting and Management Accounting Cost Accounting Standards - Cost Classification – Cost Sheet - Books of Accounts – Integral and Non Integral Accounting - Reconciliation of Cost and Financial Accounts (IncludingProblems).

### **UNIT-II: PROCESS COSTING:**

Process Costing: Meaning, Features, Applicability, Pros and Cons–Unit Costing Vs. Process Costing – Job Costing Vs. Process Costing –Normal Loss and Abnormal Loss - Process Accounts with Stocks – Inter-Process Profit – Equivalent Production – First In-First out Method (FIFO) and Average Method – Joint Products and By-products (Including problems).

### **UNIT-III: MARGINAL, ABSORPTION AND DIFFERENTIAL COSTING:**

Marginal Cost: Meaning, Features -Absorption Cost: Meaning, Pros and cons– Marginal Costing Vs Absorption Costing - Preparation of Income Statement under Marginal Costing and Absorption Costing - Decision Making: Pricing Decisions, Make or Buy Decisions, Product/Sales Mix Decisions, Key or Limiting Factor, Shut Down or Continue Decisions, Accept or Reject an offer - Differential Costing: Meaning of Differential Cost, Marginal Cost Vs. Differential Cost, Characteristics of Differential Costing, Managerial Applications of Differential Cost Analysis (including problems).

### **UNIT- IV: BUDGETARY CONTROL:**

Budget: Meaning, Essentials – Budgeting - Budgetary Control: Essentials, Advantages, Limitations – Classification of Budgets: Functional Budget: Sales Budget, Production Budget, Direct Material Budget, Direct Labor Budget, Manufacturing Overheads Budget - Capital Expenditure Budget - Cash Budget– Master Budget – Flexible Budget – Performance Budget –Traditional System of Budgeting– Zero Based Budgeting (Including Problems).

### **UNIT-V: STANDARD COSTING:**

Standards: Meaning, Types, Establishment - Standard Costing: Need, Pre-requisites,Pros and Cons - Standard Costing and Budgetary Control – Variance Analysis - Revision of Standards- Control and Efficiency Ratios(Including Problems).

### **SUGGESTED READINGS:**

1.PrashantaAthma, “Cost and Management Accounting” Himalya; 2.Jain S.P &Narang K.L., “Advanced Cost Accounting” Kalyani Publishers, New Delhi; 3.Iyengar S.P., “Cost Accounting – principles & Practice” Sultan Chand & Sons; 4.Khan M.Y & Jain P.K., “Theory and Problems in Cost Accounting” TMH; 5.Ravi M. Kishore, “Cost Management”, Taxmann; 6.Lall nigam& Jain, “Cost Accounting – Principles and Practice” Prentice-hall; 7.Manish Dutta, “ Cost Accounting – Principles & Practice”, Pearson; 8.Saxena VK &Vashist CD, “Advanced Cost & Management Accounting” Sultan Chand & Sons; 9.Colin Drury, “Management & Cost Accounting” Thomson Asia Pvt. Ltd, 10.Asish K. Bhattacharyya “ Principles and Practice of Cost Accounting”. Prentice Hall, 11.Arora M.N. “Cost Accounting –Principles & Practice” Vikas Publishing House.



**SPECIALIZATION**  
**IS – APPLICATIONS & ANALYSIS**

**DATA COMMUNICATIONS & NETWORKS**

**PAPER CODE: MCIS 14: IS-App&Analysis (5)**  
**100 PPW: 5, Credits:4**

**TOTAL MARKS: 80+15+05 =**  
**EXAM DURATION: 3 HRS**

**OBJECTIVE:** To familiarize the students with fundamentals of data communication, computer networks, network applications and services.

**UNIT-I: INTRODUCTION TO NETWORKS**

Introduction to Computer Networks and Data Communications:

Introduction – Taxonomy - Computer Networks - Basic Configurations - Network Architecture Model - Internet Model.

Fundamentals of Data and Signals - Data and Signals - Converting Data into Signals - Spread Spectrum Technology - Data Codes - Data and Signal Conversions in Action.

Media: Conducted and Wireless - Twisted Pair - Coaxial Cable - Fiber Optic Cable - Wireless Transmissions - Media Selection criteria.

**UNIT-II: MAKING CONNECTIONS –MODEMS**

Making Connections –Modems - Breaking bandwidth limitations - Modem Pools - Data Link Connections. Multiplexing Frequency - Division and Time Division Multiplexing - Business Multiplexing in action.

Errors, Error Detection and Error Control- Errors - Error Prevention - Error Control - Error Detection Techniques.

**UNIT-III: LOCAL AREA NETWORKS (LAN)**

Local Area Networks (LAN) – Introduction - Functions of LAN - Advantages and Disadvantages - Basic Topologies - Medium Access Control Protocol - IEEE802 formats - LAN Systems.

Internetworking - Bridges - Hubs - Switches - Network Servers - Routers.

LAN Software and Support Systems - Introduction to Network Operating Systems - Current Networking Operating Systems - Novell Netware - Windows NT – UNIX - LINUX – Utilities - Internet Server Software - Programming tools.

**UNIT-IV: WIDE AREA NETWORKS (WAN)**

Wide Area Networks (WAN) - Introduction - Types of Network Subnets - Connection Oriented Applications vs. Connectionless Applications.

Routing -Routing Algorithms - Routing Examples.

Network Congestion -Preventing and Handling Network Congestion.

Internet - Internet Services – WWW - Intranets and Extranets - Internet Protocols.

**UNIT-V: TELECOMMUNICATIONSYSTEMS**

Telecommunication Systems - Basic Telephone Systems - Leased Lines Services – ISDN - Frame Relay – ATM – DSN - Computer Telephone Integration.

Network Security -Basic Security Measures - Encryption and Decryption Techniques - Fire Walls - Security Policy Design Issues.

Network Design and Management - System Development Life Cycle - Network Modeling - Feasibility Studies - Capacity Planning - Creating a Base Line - Network Manager - Network Diagnostic Tools.

**SUGGESTED READINGS:**

1. Data Communications and Computer Networks - A Business Users Approach, Curt M White, Thomson Learning.
2. DC & Networking, Foronzan, McGraw Hills Publications.
3. Computer Networks, Dave, IE Publishers. James FKurose, Keith W Ross, Computer Networking A Top – Down Approach, Addison Wesley.



- 5) Exercises using financial function along with graphs and charts [PV, NPV, IRR, PMT, IPMT, NPER, RATE, Creating Balance Sheet, Investment Calculations, Depreciation calculations].
- 6) Exercises with statistical function [Descriptive Statistics, Rank and Pearson Correlation, Covariance, Regression, t-test, Z-test, F-Test and Anova].
- 7) Exercises on data validation, reliability, rotation and reduction.
- 8) Exercises on customization and analyzing data.

### **SUGGESTED READINGS:**

1. Charts and Graphs Microsoft Excel 2013 – **Bill Felen – Pearson Publication.**
2. Statistics made simple do it yourself on PC – **KVS Sarma – 2<sup>nd</sup> Edition – PHI.**
3. Microsoft Office 2007- Essential Concepts and Techniques – **Shelly Cashman Vermaat – Cengage Learning.**
4. PC software Under Windows – **Puneet Kumar – Kalyani Publishers.**
5. 100 statistical Tests in R – **N.D. Lewis – Healthes Hills Press, New Delhi.**

### **SUGGESTED READINGS FOR LAB:**

1. Problem – Solving Cases in Microsoft Access and Excel – **Ellen F Monk, Joseph A Brady & Gerard S Cook – Cengage Learning.**
2. Charts and Graphs Microsoft Excel 2013 – **Bill Felen – Pearson Publication.**
3. Statistics made simple do it yourself on PC – **KVS Sarma – 2<sup>nd</sup> Edition – PHI.**
4. PC software Under Windows – **Puneet Kumar – Kalyani Publishers.**  
100 statistical Tests in R – **N.D. Lewis – Healthes Hills Press, New Delhi.**

**SPECIALIZATION  
IS – MANAGEMENT**

**SOFTWARE ENGINEERING**

**PAPER CODE: MCIS 14: IS-Mgt. (5)**

**TOTAL MARKS: 50+35+15 =100**

**PPW: 3T + 4P, Credits:5**

**EXAM DURATION: 3 HRS**

**OBJECTIVE:**The objective of the course is to familiarize the students with the software development process, software quality assessment, and testing for the optimum functionality at reasonable costing.

**UNIT-I INTRODUCTION TO SOFTWARE ENGINEERING**

Concept of software engineering, software characteristics, software metrics: categories, areas of applications, token count, function point analysis, data structure metrics  
Software Development: Phases; Models: Waterfall model, Prototyping model, Spiral model, Rapid Application Development model

**UNIT-II: QUALITY FACTORS**

Software quality factors, cost estimations, COCOMO, project scheduling, quality assurance plans, project monitoring plans; Software risk management

**UNIT-III: SYSTEM DESIGN**

System design objectives, effective modular design (coupling, cohesion), design tools and techniques, prototyping, structured programming.

**UNIT-IV : CODING AND TESTING**

Verification, monitoring and control, testing. Testing fundamentals, test case design, functional and structural testing, test plan, activities during testing, unit and integration testing.

**UNIT- V: UML**

Brief history of the Unified process - Phases of the Unified process, Unified Process Work Products, Introduction to UML, Important views & diagram to be modeled for system by UML.

**LAB EXERCISES**

1. Develop requirements specification for a given problem
2. Develop DFD model
3. Develop UML Use case model for a problem
4. Develop sequenced diagram
5. Develop Class diagram

**SUGGESTED READINGS:**

1. Pressman , **Software Engineering: A Practitioner's Approach 6e**, McGrawHill
2. Ghezzi, **Fundamentals of Software Engineering**, Prentice Hall of India, NewDelhi.
3. Jalote, **An Integrated Approach to Software Engineering 3e**, Narosa
4. Leon & Leon, **Software Engineering**, Vikas Publishing House, NewDelhi
5. Sommerville, **Software Engineering**, Pearson Education.
6. Fenton & Pfleeger, **Software Metrics**, Thomson Learning
7. Befrooz: **Software Engineering: Oxford university Press**

**CYBER LAWS****PAPER CODE: MCIS 15: IS-Mgt. (6)****TOTAL MARKS: 80+15+05 =100****PPW: 5, Credits:4****EXAM DURATION: 3 HRS**

**OBJECTIVE**:The objective of this course is to enable students understand legal and regulatory framework for doing business in India. The student will also be able to know the Information Technology Act 2000. Along with learning cyber laws the course enables the student to understand Cyber crime, Tools and methods used in cyber crime and Cyber Security.

**UNIT-I: CYBERSPACE AND CYBER LAW:**

Introduction to cyber space and cyber law, components of cyber law, categories of cyber law, Punishments, Components of cyber law, Internet governing bodies, International aspects of electronic contracting, Global issues of Privacy in cyberspace.

**UNIT-II: INFORMATION TECHNOLOGY ACT 2000(ITA2000):**

History, overview of Information Technology Act of India 2000, Benefits of Cyber Laws, Aims and objectives of ITA2000, Digital Signature and Electronic Signature, Electronic Governance, Electronic Contracts, Regulation of Certifying Authorities, Electronic Signature Certificate, Penalties, Compensation and Adjudication, Cyber Appellate, Computer related Offences and Grey areas of ITA2000.

**UNIT-III: INTRODUCTION TO CYBER CRIME:**

Definition and Classification of Cyber Crime, Cyber Crime Legal perspective, Indian perspective and Global perspective, Categories of Cyber Crime and Cyber Stalking, Cloud computing, Risk associated with cloudcomputing,

**UNIT-IV: MOBILE AND WIRELESS DEVICES:**

Trend mobility, Authentication service security, Attacks on mobile phones, Mobile phone security, Credit Card frauds, Types of Credit Card frauds, Security implications for organizations, Organizational measurement for Handling mobile, Security policies and measures in mobile computing era.

**UNIT-V: TOOLS AND METHODS USED IN CYBER CRIME:**

Proxy servers and Anonymizers, Phishing, Password cracking, Key loggers and Spy wares, Virus and Worms, Trojan Horse and Backdoors, Steganography, DoS Attacks, SQL Injection, Buffer overflow, Attacks on wirelessnetwork.

**SUGGESTED READINGS:**

1. Ramandeepkaur, **Cyber laws and Intellectual Property Rights**, Kalyani Publishers, 7e, 2015
2. Nina Godbole&SunitBelapure**Cyber Security**, Wiley India Pvt Ltd,2012.
3. Gerald. R. Ferrera, Reder and linchtenstein, **Cyber laws – Text and Cases**,3e, Cengagelearning
4. FaiyazAhamed, **Cyber Law and Information Security**, DreamTech Press,2013
5. PankajAgarwal, **Information Security and Cyber Laws**, Acme Learning,2013
6. Manjotkaur, **Essentials of E-Business and Cyber laws**, KalyaniPublishers

**Semester - IV****ENTERPRISE RESOURCE PLANNING****PAPER CODE: MCIS 16 :Core-I****TOTAL MARKS: 80+15+05=100****PPW: 5, Credits:4****EXAM DURATION: 3 HRS**

**OBJECTIVE:**The objective of the course is to provide the students with guidelines and frameworks that can be applied to increase the probability of the ERP (or any Information Systems) implementation achieving both the project and business objectives.

**UNIT-I: INTRODUCTION TO ERP**

Definition of enterprise - enterprise resource planning - evolution of ERP systems - material requirement planning - manufacturing requirement planning – Trends - Systems and technology background - ERP systems background – Objectives - Benefits and challenges in ERP - ERP data input - ERP output capabilities - Technology-enables vs. clean sheet re-engineering - Specialties in ERP systems - Tangible and intangible benefits - Major ERP vendors.

**UNIT-II: BUSINESS PROCESS**

Business processes - ERP software changes - Designing ERP systems - choosing standard models - artifacts and processes for ERP systems - client-server architecture for ERP - Application architectures - cross functionalities - application integration.

**UNIT-III: INTRODUCTION TO BPR**

Introduction to BPR - definition and principles BPR - role of IT in BPR - IT support for BPR - strategic alignment of IT and BPR - Process engineering - enterprise business processes - BPR and organizational restructuring - organizational systems - business process integration.

**UNIT-IV: ERP SYSTEM IMPLEMENTING**

Choosing an ERP system implementing - big bang vs phased-identification of modules -developing guiding principles and detailed project plan - legacy system analysis - as is picture -mapping into ERP - Project team training - To Be design - user acceptance - detailed design - customization - construction and testing, production system development.

**UNIT-V: INTRODUCTION TO SCM & CRM**

Introduction to SCM & CRM - Meaning - Need - Origin - Elements of SCM - Future trends in SCM - Purchasing issues in SCM - The role of purchasing in an organization - The purchasing process - Sourcing decisions - Roles of supply base - Supplier selection. CRM - CRM definition - Components of CRM - CRM concepts - Goals of CRM - CRM functions - Customer Experience Management - Back office and front office functions. Post implementation issues and development SCM and CRM.

**SUGGESTED READINGS:**

1. Risk Daniel E. O'Leary, **Enterprise Resource Planning Systems, Life Cycle, Electronic commerce**, University of Southern California.
2. CVS Murthy, **ERP - Text and Case studies**, Himalaya Publications.
3. Monk, **Enterprise Resource Planning**, 2/e -Thomson.
4. Davenport Thomas H, **Process Innovation, reengineering work through information technology**, Harvard Business School Press, Boston, MA1993.
5. Micheql Hammer and Champy James, **Reengineering the corporation, A manifesto for business revolution**, Harper Business NY.
6. Alexix Leon, **Enterprise Resource Planning**, 2<sup>nd</sup> Edition, McGrawHill.
7. Jylldyche, **CRM Hand Book**, Pearson Publishers.

## **BUSINESS AND CORPORATE TAXATION**

**PAPER CODE: MCIS 17 :Core-II**

**PPW: 5, Credits:4**

**TOTAL MARKS: 80+15+05=100**

**EXAM DURATION: 3 HRS**

**OBJECTIVE:** *to acquaint the student with the Theoretical and Practical aspect of Assessing Partnership Firms, Companies, Co-operatives and Trusts. To make the student aware of basics of GST and Customs Act.*

### **UNIT-I: ASSESSMENT OF PARTNERSHIP FIRMS & AOP:**

Meaning of Partnership Firm - Conditions for Assessment as a firm U/S 184 and 185 - Treatment of interest and remuneration paid to partners U/S 40(b) - Computation of Total Income - Assessment of Partners of Firm - Change in constitution of Firm Succession of one firm by another firm - Assessment of dissolved or discontinued firm - Partnership Firm Assessed as Association of Persons (AFAOP) - Computation of Total Income - Treatment of share of income received by partners of PFAOP (Theory and Problems).

### **UNIT-II: ASSESSMENT OF COMPANIES-I:**

Meaning of Company - Types of Companies - Computation Procedure - Taxable income - Deductions - Tax Liability - MAT - Carry Forward and set off of losses - Tax on Distributed Profits - Tax on income distributed to Unit holders - Tax on income receipt from venture capital companies and funds (Theory and Problems).

### **UNIT-III: ASSESSMENT OF COMPANIES – II & OTHER TAXES:**

Companies: Computation of total income of companies - Determination of Tax Liability (Problems). Other Taxes: Security Transaction Tax - Tonnage Tax (Theory and Problems).

### **UNIT-IV: ASSESSMENT OF CO-OPERATIVES AND TRUSTS:**

Cooperative Societies: Meaning - Deduction u/s 80(p) - Other deductions - Computation of Tax (Theory and problems). Trusts: Definition – Creation - Registration - Types of Trusts - Tax Exemptions - Accumulation of income - Income not exempted - Assessment of Trust (Theory and problems).

### **UNIT – V: FUNDAMENTALS OF GST& CUSTOMS ACT:**

GST Introduction - Registration – Inter & Intra State Acts under GST - Distinction between goods and services - Levy and collection of GST - Exemptions from GST - Place, Time and value of supply input tax credit - Payment of GST. (Theory only)

Customs Act: Meaning- Classification – Types of Customs duty – Exemptions.

### **SUGGESTED READINGS:**

1. Vinod K. Singhanian: Taxman's Direct Tax Laws.
2. V.P. Gaur and D.B. Narang Income Tax Law and Practice- Kalyani Publications
3. Girish Ahuja and Dr. Ravi Gupta: Direct Tax Law and Practice and Tax Planning.
4. CA (Dr.) KM Bansal Taxmann's Fundamentals of GST & Customs Law
5. GST and Customs : K. Bansal, Taxmann Publications
6. VS Date Indirect Taxes: Taxmann's publications

## **MANAGERIAL ECONOMICS AND BUSINESS ENVIRONMENT**

**PAPER CODE: MCIS 18:Core-III**

**PPW: 5, Credits:4**

**TOTAL MARKS: 80+15+05=100**

**EXAM DURATION: 3 HRS**

**OBJECTIVE:** To Impart Conceptual and Practical knowledge of Managerial; Economics. To familiarise and acquaint the students with the knowledge of business environment

### **UNIT-I: INTRODUCTION TO MANAGERIAL ECONOMICS AND DEMAND ANALYSIS**

Meaning of Managerial Economics - Nature of Managerial Decision making - Managerial Decision making process - Nature of profits (Economic VS Accounting profit) - Concept of Derivative - Functional Relationships of Managerial revenue and total revenues functions, Managerial Cost and total cost functions - Concept of Economics Optimisation. (including simple problems).

Demand theory and Analysis - Individual demand and Market demand - Factors determining demand - Elasticity of Demand - price Elasticity - Income Elasticity - Cross Elasticity - Demand estimation – Meaning - methods. (including problems)

### **UNIT-II: PRODUCTION AND COST ANALYSIS**

Meaning of Production function - Cobb Douglas Production Function- Production with one variable Unit- production with two variable inputs - Optimal employment to a factor of production.

Cost function - short run cost functions - finding minimum average variable cost through equation – Long run cost function - Profit contribution analysis (including problems).

### **UNIT-III: MARKET STRUCTURE**

Perfect Competition :- Characteristics - Profit maximization Monopoly:- Characteristics- Price determination - Monopoly Competition:- Characteristics- Price and output determination in the short run & long run. Oligopoly: Characteristics - Kinked demand (Theory only)

### **UNIT IV:INTRODUCTION TO BUSINESS ENVIRONMENT**

Concept - Elements - Internal and external Environment - Policy Environment - Political environment – Legal Environment – Social Cultural Environment.

### **UNIT V: ECONOMIC REFORMS IN INDIA**

Liberalisation: Industrial Policy 1991–NITI Ayog.

Privatisation: Objectives – Forms of privatisation – Pros & cons of privatization.

Globalisation: Meaning – drivers – modes of entry.

### **SUGGESTED READINGS:**

1. S.K.Bedi – Business Environment
2. Fransis Cherunilam – Business Environment – Himalya Publishing House.
3. P.K.Ghosh – Business & Government – Sultan Chand & Sons.
4. Adhikiary, M: Economic Environment of Business, Sultan Chand & Sons, New Delhi.
5. Ahluwalia. I.J. Industrial Growth in India, Oxford University Press, Delhi.
6. Alagh, Yoginder K: Indian Development Planning and Policy, Vikas Pub, N. Delhi.



**SPECIALIZATION**  
**IS – APPLICATIONS & ANALYSIS**

**BUSINESS DECISIONS USING SPSS**

**PAPER CODE: MCIS 19: IS-App&Analysis (7)**  
**PPW: 3T + 4P, Credits:5**

**TOTAL MARKS: 50+35+15 = 100**  
**EXAM DURATION: 3HRS**

**UNIT-I: INTRODUCTION TO SPSS**

**SPSS** – Introduction, Starting SPSS, Data editor, Toolbar, Menu Bar, Edit Menu, View Menu, Data Menu, Transform Menu, Analyse Menu, Graphs Menu. Creating a Data File, Defining Variables, Variable Labels, Missing Values, SPSS Procedure for Creating a Data File, Frequency Distributions, Editing, Coding, Classification and Tabulation

**UNIT-II: MEASURES OF CENTRAL TENDENCY, DISPERSION & CORRELATION**

Descriptive Statistics - Graphic Presentation, Measures of Central Tendency, Measures of Dispersion, Skewness.

**Correlation** – Meaning - Methods of computing correlation - correlation coefficients - Scatter. Diagram. (Working out problems using SPSS only)

**UNIT-III: REGRESSION AND TIME SERIES ANALYSIS**

**Regression:** Meaning - Methods of computing regression - regression coefficients

**Time series analysis:** Meaning – Components – Computing trend. (Working out Problems only using SPSS)

**UNIT –IV: LARGE AND SMALL SAMPLE TESTS AND NON PARAMETRIC TESTS**

**Large & small Sample tests** – Test of significance for number of successes protection of successes, Difference between proportions, test of significance for sample mean, test for difference between means, test for difference between standard deviations, t test for significance of sample mean, t test for difference between independent and t test for difference between dependent samples (Working out problems only using SPSS).

**Non Parametric Tests:** Chi-Square Test for Goodness of fit, Chi-Square Test of Independence, Kruskal –Wallis Test – Friedman Test, Wilcoxon Rank sum test, Spearman's Rank Order Correlation, Multiple Response – Analysis, Multiple Dichotomy Analysis, Sign Test, Test of randomness, Mann whitney U test, KolmoglovSmirnov test. (Theory & Problems)

**Unit V: ANALYSIS OF VARIANCE AND FACTOR ANALYSIS**

**F- test:** Meaning and Applications – **ANOVA:** Assumptions - Procedure - One way and two-way analysis of variance (including problems).

**Factor Analysis :** Objectives of Factor Analysis, Designing Factor Analysis, Assumptions of Factor Analysis, Procedure of deriving Factors, Interpreting the Factors, Validation of Factor Analysis. (Theory & Problems)

**Discriminate analysis,** Multi dimensional Scaling. Checking the internal validity, reliability of data – Cronbach alpha. (Theory & Problems)

**LAB EXERCISES**

**1. AN OVERVIEW OF SPSS:** Starting an SPSS Session, Creating a New Dataset, Using an Existing Dataset, Manipulating and Merging Datasets, Importing and Exporting Data, Printing Datasets, Descriptive Statistics in SPSS (mean, standard deviation, variance, range, frequencies)

**2. GRAPHS:** Creating and editing graphs and charts, Bar charts, histograms, percentiles

**3. Cross Tabulation and chi-square analyses**

**4. Correlation:** Bivariate Correlation

**5. Regression**

**6. Parametric Tests:** The T-test procedure-Independent –samples, paired samples, and one sample tests and Anova procedure

**7. Factor Analysis**

**8. Non-Parametric Tests**

**SUGGESTED READINGS:**

- 1) Levin & Rubin: Quantitative Approaches in Management, Pearson
- 2) S.C. Gupta: Fundamentals of Statistics, Himalaya
- 3) D.C. Sancheti & V.K. Kapoor: Statistics, Sultan Chand & Sons
- 4) Anand Sharma: Quantitative Techniques for Decision Making Himalaya
- 5) SPSS 17.0 for Researchers - Dr. S L Gupta, Hitesh Gupta, 2<sup>nd</sup> Edition, International Book House Pvt. Ltd.
- 6) Data Analysis with SPSS, Version 16 – Carrer Nash – Cengage Learning India Pvt.Ltd.
- 7) Basic SPSS Tutorial – Manfred te Grotenhuis – Sage Publications.
- 8) Marketing Research – Nargundkar, Tata McGrawHills
- 9) Sp Gupta – Statistical Methods, Sultan Chand

**SUGGESTED READINGS FOR LAB:**

1. SPSS for Windows, Step; George and Mallery, Pearson
2. Data Analysis with SPSS, Carver and Nash, Cengage.

**WEB DESIGNING**

**PAPER CODE: MCIS 20: IS-App&Analysis/Mgt. (8)**  
**PPW: 3T + 4P, Credits:5**

**TOTAL MARKS: 50+35+15 = 100**  
**EXAM DURATION: 3HRS**

**OBJECTIVE:**The Course emphasizes on the skills of designing and creation of web pages, Scripting & Markup language, client side Scripting Language, Server Side Scripting and importance of PHP & My SQL.

**UNIT I: INTRODUCTION TO HTML**

Introduction to HTML, Structure of HTML Document, Basic HTML Tags working with tables, Working with Form Elements, Working Images. Working with list order list, Un order list, Working with CSS. Inline and Internal External Style sheet.

**UNIT II: JAVA SCRIPTS**

JAVA Scripts: Introduction What is Client Side Scripting Languages, Data Types Operators Functions Predefined Functions, User Defined Functions, Control Statements IF, Nested IF Loops Break & Continues Statements.

**UNIT III: OBJECTS**

(Math Objects, Number Objects, Array Objects, Date Objects) Event Handling, On load on Unload on Click, On Focus, On blur On submit On Mouse over, On Mouse Down.

**UNIT IV: PHP : INTRODUCTION**

PHP : Introduction to PHP, PHP Tags, Statements, white space, PHP Data Types , Using Operators, Making decisions conditionals, Using Arrays , Array Operators, Multidimensional Arrays, /sorting Arrays, Using Functions in PHP, using Parameters, Passing reference and passing value, Object Oriented PHP concepts class and attributes operators , inheritance, Encapsulation Abstract Methods and ClassError ExpectationHandling.

**UNIT V: MY SQL**

My SQL: Designing your web Data base, Relations Database concepts, Web Data base Architecture, Logging to My SQL, Creating Data base Tables , what is SQL, Retrieving data from the data base, DDL,DML, Statements, Views joins, functions

**LAB EXERCISES**

1. Creating HTML Pages to test differentTags.

- a. Headertags
- b. Formattingtags
- c. PhysicalTags
- d. Logical Tags

2. HTML TableFormatting

3. Order list and Un-orderLists
4. CreatingFrames
5. Write about CSS,
6. Types of CSS
7. Usage Data and the methods of Data and TimeObjects
8. Floating alerts, aligning text and setting box dimension usingCSS
9. Using HTMLEvents
10. Using PHP Data types andoperators

**SUGGESTED READINGS:**

1. PHP and My SQL Web Development, 4<sup>th</sup> Edition, Luke Welling, Laura Thomson, Publisher: AddisonWesley.
2. Beginning HTML, XHTML, CSS, and JavaScript, Jon Duckett, Publication/Wiley
3. HTML5, Black Book Dream Tech Publications, Wiley India PvtLimited.
4. Willard, Web Design A Beginners Guide, Tata McGrawHill
5. Roy: Web technology, Oxford UniversityPress

**SPECIALIZATION  
IS – MANAGEMENT****E- BUSINESS MANAGEMENT**

**PAPER CODE: MCIS 19: IS-Mgt. (7)**  
**PPW: 5, Credits:4**

**TOTAL MARKS: 80+15+05 =100**  
**EXAM DURATION: 3 HRS**

**OBJECTIVE** :To understand the practices and technology to start an online business

**UNIT – I : INTRODUCTION TO E-BUSINESS**

E- Business, E – Business Vs E – Commerce, Economic force – advantages – myths – E – Business models, design, develop and manage E-Business, Web 2.0 and Social Networking, Mobile Commerce, S – Commerce.

**UNIT – II : TECHNOLOGY INFRASTRUCTURE**

Internet and World Wide Web, internet protocols – FTP, intranet and extranet, information publishing technology – basic of web server hardware and software.

**UNIT – III : BUSINESS APPLICATIONS**

Consumer oriented E – Business – E-Tailing and models – Market on web – advertising, e-mail marketing, affiliated programs – E-CRM; online services, Business oriented E-Business, E – Governance, EDI on the internet, Delivery Management System, Web Auctions, Virtual Communities and Web Portals – Social Media Marketing

**UNIT – IV : E – BUSINESS PAYMENTS AND SECURITY**

E – Payments – Characteristics of payment of systems, protocols, E-Cash, E-Cheque and Micro payment systems – Internet Security – Cryptography – Security Protocols – Network Security.

**UNIT – V : LEGAL AND PRIVACY ISSUES**

Legal, Ethics and privacy issues – Protection needs and methodology – Consumer Protection, cyber laws, contracts and warranties, Taxation and encryption policies.

**SUGGESTED READINGS:**

1. ParagKulkarni, SunitaJahirabadkao, PradeepChande - E – Business – Oxford University Press2012.
2. Hentry Chan & el – E-Commerce – Fundamentals and Applications – Wiley India Pvt. Ltd., 2007.
3. Gary P. Schneider – Electronic Commerce – Thomson Course Technology Fourth Annual Edition, 2007.
4. Bharat Bhasker, Electronic Commerce – Frame Work Technologies and Application, 3<sup>rd</sup> Edition – Tata McGraw Hill Publications,2009.
5. Kamlesh K. Bajaj and Debjani Nag – E – Commerce – the cutting edge of Business – Tata McGraw Hill Publications, 7<sup>th</sup> reprint,2009.
6. Kalakota et al - Frontiers of Electonic Commerce – Addison Wesley,2004.
7. MichealPapaloelon and Peter Robert – E-Business – Wiley India,2006.

## WEB DESIGNING

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- a. Headertags
- b. Formattingtags
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5. Roy: Web technology, Oxford UniversityPress