

GURU NANAK COLLEGE (AUTONOMOUS)

(Affiliated to University of Madras and Re-Accredited at 'A' Grade by NAAC)

Velachery Main Road, Velachery, Chennai – 600042.



B.Com (Information Systems Management)

(SEMESTER PATTERN WITH CHOICE BASED CREDIT SYSTEM)

Syllabus

(For the candidates admitted in the Academic year 2016-17 and thereafter)

VISION

To evolve into a research department in the field of Information System Management

MISSION

- To enable the students to have an edge over the usage of technology and informatics in the field of management and commerce.
- Deepen and extend knowledge about the formation and utilization of human capabilities.
- To provide high quality technological education, strongly integrated with human values of Equality, Compassion, Sharing a social responsibility.

PROGRAMME OUTCOME

1. After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, Finance Manager, HR Manager, Project Manager and over all Administration abilities of a Company.
2. Capability of the students to make decisions at personal & professional level will increase after completion of this course.
3. Students can independently start up their own Business.
4. Students can get thorough knowledge of finance, commerce and computer programming languages.
5. The knowledge of different specializations in accounting, costing, systems and finance with the practical exposure helps the students to stand in organization.

PROGRAMME SPECIFIC OUTCOMES

The students can get the knowledge, skills and attitudes during the end of the B.com degree course. By goodness of the preparation, they can turn into a Manager, Accountant, Systems Manager, and Computer Programmer, Web developer, Teacher, Professor, Entrepreneur and Government employees. Students will prove themselves in different professional exams like C.A., CMA, UPSC, as well as higher education courses like MBA, MCA, MSW, and M. Com etc. The students will acquire the knowledge, skill in different areas of communication, decision making, Innovations and problem solving in day-to-day business activities

COURSE STRUCTURE
B. Com (INFORMATION SYSTEM MANAGEMENT)
2016-17 Batch onwards

Semester	Part	Course Component	Subject Code	Subject Name	Credits	Hours	Internal	External	Total
Semester - I	I	Language	16UTAMF01	Tamil - I	3	6	50	50	100
	II	English	16UENGF21	English - I	3	6	50	50	100
	III	Core Paper-I	16UISMC01	Financial Accounting (Common to B.Com (BM), B.Com (MM) & B.B.A.)	4	6	50	50	100
	III	Core Paper-II	16UISMC02	Principles of Management (Common to B.Com (A&F), B.Com (BM), B.Com (MM) & B.B.A.)	4	5	50	50	100
	III	Allied-I	16UISMA01P	Basic Computer Skills for Managers (Practicals)	5	5	50	50	100
	IV	Non Major Elective-I	16UNME01P	Overview of ISO	2	2		100	100
	IV	Soft Skills-I	16UGSLS01	Listening & Speaking Skills	3	-		100	100
Total Credits: 24 / Total Hours per week: 30									
Semester - II	I	Language	16UTAMF02	Tamil - II	3	6	50	50	100
	II	English	16UENGF22	English - II	3	6	50	50	100
	III	Core Paper-III	16UISMC03	Business Communication	4	5	50	50	100
	III	Core Paper-IV	16UISMC04	Management Accounting (Common to B.B.A., B.Com (ISM) & B.Com (MM))	4	5	50	50	100
	III	Allied-II	16UISMA02	Data Structures	5	6	50	50	100
	IV	Non Major Elective-II	16UNME02P	Basics of Business Insurance	2	2	-	100	100
	IV	Soft Skills-II	16UGSLS02	Reading & Writing Skills	3	-	-	100	100
Total Credits: 24 / Total Hours per week: 30									

Semester - III	III	Core Paper-V	16UISMC05	Marketing Management (Common to B.Com(ISM), B.Com (BM) & B.Com (MM))	4	5	50	50	100
	III	Core Paper-VI	16UISMC08	Cost Accounting (Common to B.Com(BM) & B.Com (MM))	4	6	50	50	100
	III	Core Paper-VII	16UISMC06	Programming in C (Theory)	4	6	50	50	100
	III	Core Paper-VIII	16UISMC07P	Programming in C (Practical)	4	5	50	50	100
	III	Allied-III	16UMATA18	Business Statistics and OR - I (Common to B.B.A, B.Com (BM) & B.Com (MM))	5	6	50	50	100
	IV	Soft Skills-III	16UGSLS03	Personality Enrichment	3	2	-	100	100
Total Credits: 24 / Total Hours per week: 30									
Semester - IV	III	Core Paper-IX	16UISMC11	Fundamentals of Database Concepts	4	5	50	50	100
	III	Core Paper-X	16UISMC09	OOPS with C++ (Theory)	4	5	50	50	100
	III	Core Paper-XI	16UISMC10P	OOPS with C++ (Practical)	4	5	50	50	100
	III	Core Paper-XII	16UISMC12	Research Methods in Business (Common to B.Com (MM))	4	5	50	50	100
	III	Allied-IV	16UMATA24	Business Statistics and OR - II (Common to B.B.A, B.Com (BM) & B.Com (MM))	5	6	50	50	100
	IV		16UEVS401	Environmental Studies	2	2		100	100
	IV	Soft Skills-IV	16UGSLS05	Quantitative Aptitude	3	2		100	100
Total Credits: 26 / Total Hours per week: 30									

Semester - V	III	Core Paper-XIII	16UISMC13	Management Information System (Common to B.B.A.)	4	6	50	50	100
	III	Core Paper-XIV	16UISMC14	Financial Management (Common to B.Com (MM) & B.B.A)	4	6	50	50	100
	III	Core Paper-XV	16UISMC15	Web Technology (Theory)	4	6	50	50	100
	III	Core Paper-XVI	16UISMC16P	Web Technology (Practical)	4	5	50	50	100
	III	Elective-I (Interdisciplinary Elective)		Essentials Office Automation Tools and Email Etiquette (Practical)	5	6	50	50	100
	IV		16UVED401	Value Education	2	1		100	100
Total Credits: 23 / Total Hours per week: 30									
Semester - VI	III	Core Paper-XVII	16UISMC17	E- Business (Common to B.B.A, B.Com (MM))	4	6	50	50	100
	III	Core Paper-XVIII	16UISMC18	Entrepreneurial Development (Common to B.Com (BM), B.Com(MM), B.B.A, B.Com(A&F))	4	6	50	50	100
	III	Core Paper-XIX	16UISMC19	Human Resource Management (Common to B.B.A., B.Com (BM), B.Com (MM) & B.Com (A&F))	4	6	50	50	100
	III	Elective-II	16UISME02	(A) Software Project Management (B) Introduction To Cloud Computing	5	6	50	50	100
	III	Elective-III	16UISME03	Project Work	5	6		100	100
	V			Community Service	1	-		100	100
Total Credits: 23 / Total Hours per week: 30									
Grand Total Credits: 144 / Total Hours per week: 180									

SEMESTER - I

CORE 1 - FINANCIAL ACCOUNTING

SUBJECT CODE : 16UISMC01	THEORY & PROBLEM	MARKS : 100
SEMESTER : I	CREDITS : 4	No. OF HOURS PER WEEK : 6

(Common to B.Com (BM), B.Com (MM), B.B.A)

COURSE OBJECTIVES:

- To build the conceptual understanding developed in simple financial accounting.
 - To get the basic skills in financial accounting for the beginners.
- students about maintaining the books of accounts for further reference.

UNIT I:

Meaning and scope of Accounting, Basic Accounting Concepts and Conventions – Objectives of Accounting – Accounting Transactions – Double Entry Book Keeping – Journal, Ledger, Preparation of Trial Balance – Preparation of Cash Book.

(15 Hours)

UNIT II:

Preparation of Final Accounts of a Sole Trading Concern – Adjustments Receipts and Payments Account, Income & Expenditure Account and Balance Sheet of Non-Trading Organizations.

(25 Hours)

UNIT III:

Classification of errors – Rectification of errors – Preparation of Suspense Account - Bank Reconciliation Statement (Simple Problems Only)

(15 Hours)

UNIT IV:

Depreciation – Meaning, Causes, Types – Straight Line Method – Written Down Value Method. Insurance claims – Average Clause (Loss of stock)

(18 Hours)

UNIT V:

Single Entry – Meaning, Features, Defects, Differences between Single Entry and Double Entry System – Statement of Affairs Method – Conversion Method.

(17 Hours)

Prescribed Texts

1. T.S. Reddy & A. Murthy, Financial Accounting - Margham Publications Chennai – 5/e
2. Financial Accounting – Dr. S. Manikandan and R. Rakesh Shankar – 3rd Edition- SCITECH Publisher

Reference Books

1. Jain & Narang, Financial Accounting - Kalyani Publishers. New Delhi. 2014
2. R.L. Gupta & V.K. Gupta, Advanced Accounting - Sultan Chand & Sons. New Delhi.
3. Shukla & Grewal, Advanced Accounting – S Chand New Delhi 18th Edition.
4. Dalston L. Cecil and Jenitra L. Merwin, Financial Accounting, Learn Tech press, Trichy, 1st Edition 2015
5. S. Parthasarathy and A. Jaffarulla, Financial Accounting - Kalyani Publishers – New Delhi.

Web References

1. <http://www.accountingcoach.com>
2. <http://www.learnaccountingforfree.com>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
A	Unit – 1	2	1
	Unit – 2	1	1
	Unit – 3	2	
	Unit – 4	2	1
	Unit – 5	1	1
B	Unit – 1	1	1
	Unit – 2		1
	Unit – 3		2
	Unit – 4	1	1
	Unit – 5		1
C	Unit – 1		1
	Unit – 2		1
	Unit – 3		
	Unit – 4		1
	Unit – 5		1

CORE 2 - PRINCIPLES OF MANAGEMENT

SUBJECT CODE : 16UISMC02	THEORY	MARKS : 100
SEMESTER : I	CREDITS : 4	TOTAL HOURS: 75

(Common to B.Com (A&F), B.Com (BM), B.Com (MM), B.B.A)

COURSE OBJECTIVES:

➤To enable the students to acquire knowledge on principles, concepts and functions of management and inherit the importance of decision making

UNIT I

Management: Importance – Definition – Nature and Scope of Management Process – Role and Functions of a Manager – Levels of Management – Development of Scientific Management and other Schools of thought and approaches. **(15 Hours)**

UNIT II

Planning: Nature – Importance – Forms – Types – Steps in Planning – Objectives – Policies – Procedures and Methods – Natures and Types of Policies – Decision –making – Process of Decision – making – Types of Decision. **(15 Hours)**

UNIT III

Organizing: Types of Organisations – Organisation Structure – Span of Control and Committees – Departmentalisation – Informal Organisation- Authority – Delegation – Decentralisation – Difference between Authority and Power – Responsibility. **(15 Hours)**

UNIT IV

Recruitment – Sources, Selection, Training – Direction – Nature and Purpose. Co-ordination – Need, Type and Techniques and requisites for excellent Co-ordination – Controlling – Meaning and Importance – Control Process. **(15 Hours)**

UNIT V

Definition of Business ethics - Types of Ethical issues -Role and importance of Business Ethics and Values in Business -Ethics internal - Ethics External - Environment Protection - Responsibilities of Business **(15 Hours)**

Prescribed Texts

1. C.B.Gupta, Management Theory & Practice - Sultan Chand & Sons - New Delhi.
2. L.M.Prasad, Principles & Practice of Management - Sultan Chand & Sons - New Delhi.

Reference Books

1. P.C. Tripathi& P.N Reddy, Principles of Management-Tata Mc.Graw Hill - New Delhi. 5/e
2. Weihrich and Koontz, Management – A Global Perspective 10th Edition
- 3.N.Premavathy, Principles of Management - Sri Vishnu Publication - Chennai.
- 4.J.Jayasankar, Business Management - Margham Publication – Chennai- Reprint 2009

Web References

1. <http://www.12manage.com/>
2. <http://www.businessballs.com>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	3	
	Unit – 4	2	
	Unit – 5	2	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	1	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2		
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5	1	

ALLIED 1 - BASIC COMPUTER SKILLS FOR MANAGERS

SUBJECT CODE : 16UISMA01P	PRACTICAL	MARKS : 100
SEMESTER : I	CREDITS : 5	TOTAL HOURS: 75

COURSE OBJECTIVES:

- **To familiarize a student** with the basic office applications
- To understand the Word Processing Basics
- To comprehend and implement various spreadsheet features
- To understand Database Basics
- To generate reports
- To write basic HTML programs

UNIT – I

Word: Text Manipulations -Usage of Numbering, Bullets, Footer and Headers-Usage of Spell check, Find & Replace-Text Formatting -Picture insertion and alignment -Creation of documents, using Templates-Creation templates -Mail Merge Concepts -Copying Text & Pictures from Excel
(15 Hours.)

UNIT-II

Excel: Cell Editing -Usage of Formulae and Built-in Functions -File Manipulations -Data Sorting (both number and alphabets)-worksheet Preparation-Drawing Graphs -Usage of Auto Formatting - security and privacy-pivot tables-macros-hyperlinks
(15 Hours.)

UNIT – III

Microsoft Access: Creating and working with database-customizing fields-customizing tables-creating forms-creating queries-creating charts
(15 Hours.)

UNIT-IV

Create reports using Microsoft Access: Using report wizard-summary report-design view-modify existing report-add/delete report controls-calculating values in a report-introducing report section grouping report records-beautifying forms and reports.
(15 Hours.)

UNIT – V

HTML: Standard HTML tags-Formatting tags-Using Marquee and color in HTML-Anchors and links-Inserting list-Inserting tables-Preformatted text-Adding Images-Creating clickable Images-Forms and controls-Frames
(15 Hours)

Prescribed Text:

1. A first Course in Computers, Sanjay Saxena, Vikas Publishing House Pvt. Ltd.,
2. Microsoft Office in Easy steps, Stephen Cope stake, Comdex Computer

Reference Books

1. Teach yourself, MS Office for Windows, Corey Sandler, Tom Bedgelt, Jan Weingarten, BPB Publication.
2. HTML & CSS: The Complete Reference, Fifth Edition by Thomas Powell
3. MS-Office Access 2007 –Curtis D.frye-PHI -2007

Web References:

1. <http://msdn.microsoft.com>
2. <http://www.gcflernfree.org/>

NME 1 - AN OVERVIEW OF ISO

SUBJECT CODE : 16UNME01P	THEORY	MARKS : 100
SEMESTER : I	CREDITS : 2	TOTAL HOURS: 30

Common to B.Com (BM) and B.Com (MM)

COURSE OBJECTIVE:

- To introduce students to the field of standardization through quality management system.
- To highlight the importance of ISO for business houses.

UNIT-I

An Introduction to ISO 9000, 9001, 9002, 9003. The Quality systems to be certified- Meaning of ISO- Benefits of ISO 9001- Certification- General Scheme of ISO 9001.

(6 Hours)

UNIT-II

QMS (Quality Management Systems). Meaning- Principles of ISO 9001-2000-Preparing a specimen QMS – future of ISO? – QMS Documentation- QMS Process & Measurement.

(6 Hours)

UNIT-III

ISO 9001-2000 Requirements- Explanation of main clauses – Time Line and cost Implication of Implementing.

(6 Hours)

UNIT-IV

ISO 9001-2000 and QIS- Comparison of ISO 901 and the capability Maturity Model for software. Certification bodies operating Multinationals.

(6Hours)

UNIT-V

ISO and how to hire an ISO 9000 Consultant- What is Internal Quality Auditing.

(6 Hours)

Reference Books

1. Guide to ISO 9001-2000. A.K.Chakraborty, P.K.Basu, S.C.Chakravarthy
PUBLICATIONS:
Asian Books Pvt. Ltd.
2. ISO 9001 for small business what to do Advice from ISO/TC 176.
3. ISO 9001:2000 Quality Management System Design – Jay Schlickman

Web References:

1. http://www.iso.org/iso/iso_9000
2. <http://www.isoindia.org/>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	ESSAY Answer ANY 5 out of 10 questions (each in 1200 words)	1-10	20	100
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	2	

SEMESTER - II

CORE 3 - BUSINESS COMMUNICATION

SUBJECT CODE : 16UISMC03	THEORY	MARKS : 100
SEMESTER : II	CREDITS : 4	TOTAL HOURS: 75

(Common to B.Com (A&F), B.Com (BM), B.Com (MM), B.B.A)

COURSE OBJECTIVES:

- To enable the students to acquire knowledge about the importance of communication in today's competitive business environment

UNIT I

Definition – Methods – Types – Principles of effective Communication – Barriers to Communication – Business Letter – Layout. **(15 Hours)**

UNIT II

Kinds of Business Letters-Application Letters- Interview – Appointment – Acknowledgement – Promotion – Enquiries – Replies – Orders – Sales – Circular – Complaints. **(15 Hours)**

UNIT III

Bank Correspondence – Insurance Correspondence – Agency Correspondence – Correspondence with Shareholders, Directors. **(15 Hours)**

UNIT IV

Reports Writing – Agenda, Minutes of Meeting – Memorandum – Office Order – Circular – Notes. **(15 Hours)**

UNIT V

Modern Forms of Communication: Fax – E-mail – Video Conferencing – Internet – Websites and their use in Business – Effective Presentation Skills. **(15 Hours)**

Recommended Texts

1. N.S. Raghunathan B.Santhanam – Margham Publication – Third Edition – Business Communication
2. Business Communication & Organisation Management – C.B.Gupta

Reference Books

1. Bovee, Thill, Schatzman, Business Communication Today - Peason Education Private Ltd. - New Delhi.
2. Penrose, Rasbery, Myers, Advanced Business Communication - Bangalore.
3. Simon Collin, Doing Business on the Internet - Kogan Page Ltd.- London.
4. Mary Ellen Guffey, Business Communication – Process and Product - International Thomson Publishing - Ohio.

Web References

1. <http://www.businesscommunication.org/>
2. <https://www.iabc.com/>
3. <http://www.etiquettetrainer.com/>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	1	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3		
	Unit – 4	1	
	Unit - 5	1	

CORE 4 - MANAGEMENT ACCOUNTING

SUBJECT CODE : 16UISMC04	THEORY & PROBLEM	MARKS : 100
SEMESTER : II	CREDITS : 4	No. OF HOURS PER WEEK : 6

(Common to B.Com (MM), B.B.A)

COURSE OBJECTIVES:

- To understand and analyze financial statement to help in managerial decision making.
- To prepare statements like Cash Flow, Fund Flow, Budgets etc., so as to assist the managements to take meaningful and correct decisions.
- To learn the various tools and techniques in cost control like variance analysis and budgetary control.

UNIT I

Management accounting – Meaning, nature, scope and functions, need, importance and limitations – Management Accounting vs. Cost Accounting. Management Accounting vs. Financial Accounting. **(15 Hours)**

UNIT II

Analysis and Interpretation of financial statements – Nature, objectives, essentials and tools , methods – Comparative Statements, Common Size statement and Trend analysis. **(13 Hours)**

UNIT III

Ratio Analysis – Interpretation, benefits and limitations. Classification of ratios-Liquidity, Profitability, turnover. **(12 Hours)**

UNIT IV

Funds flow statements and Cash flow statement (AS-3). Budgets and budgetary control – Meaning, objectives, merits and demerits-- Types of Budgets – Production, Cash and Flexible Budgets **(25 Hours)**

UNIT V

Marginal costing (excluding decision making) absorption costing and marginal costing – CVP analysis. **(25 Hours)**

Recommended Texts

1. T. S. Reddy and Hari Prasad Reddy, Management Accounting, 2014-MarghamPulication.
2. SN Maheswari, Management Accounting - Sultan Chand & Sons.

Reference Books

1. RSN Pillai & Bagavati, Management Accounting - S Chand & Co Ltd - New Delhi.
2. Horngren Sunder Stratton, Introduction to Management Accounting - Pearson Education
3. Dalston L. Cecil and Jenitra L. Merwin, Management Accounting, Learn Tech press, Trichy, 3rd Edition 2015

Web References:

1. <http://pakaccountants.com/courses/managementaccounting/>
2. <http://www.elearnuk.co.uk/course/management-accounting>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	1	1
	Unit – 4	1	1
	Unit – 5	2	1
Section B	Unit – 1	1	
	Unit – 2	1	1
	Unit – 3		1
	Unit – 4		2
	Unit – 5		2
Section C	Unit – 1		
	Unit – 2		1
	Unit – 3		1
	Unit – 4		1
	Unit - 5		1

ALLIED 2 - DATA STRUCTURES

SUBJECT CODE : 16UISMA02	THEORY	MARKS : 100
SEMESTER : II	CREDITS : 5	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

- The aim is to introduce the subject of Data Structures to the students and make them aware of the different types of Data Structures which is being using in different type of business management.

UNIT I

Definition – Data Structure, Primitive and Composites Data Structure (List, Array, Stack, Queue, tree, files), array - 1 D array – 2D array- Operation on array – (Simple Addition, Subtraction, Multiplication and Division) **(20 Hours)**

UNIT II

The Stack-Operations Performed on Stack-Stack Implementation- Stack Using ArraysApplications of Stacks.

The Queue-Algorithms for Queue Operations -Other Queues-Circular Queue- Deques- Applications of Queue. **(15Hours)**

UNIT III

Linked List-Linked List-Representation of Linked List-Advantages and Disadvantages- Operation on Linked List-

Types of Linked List- Singly Linked List-Doubly Linked List-Circular Linked List-Priority Queues **(15Hours)**

UNIT IV

Sorting Techniques-Complexity of Sorting Algorithms-Bubble Sort-Selection Sort-Insertion Sort-Quick Sort- Merge Sort-Heap Sort

Searching and Hashing-Linear or Sequential Searching-Binary Search-Hashing **(20 Hours)**

UNIT V

The Trees-Basic Terminologies-Binary Trees-Binary Tree Representation- Operations on Binary Tree (In order – Preorder – Post Order Traversal)

Graphs-Basic Terminologies-Representation of Graph-Operations on Graph-Breadth First Search-Depth First Search **(20 Hours)**

Prescribed Texts

1. Ellis Horowitz & Sartaj Sahani, Fundamentals of Data Structures - Galagotia Book Source - New Delhi.
2. Seymour LipschutzSchaum is Outline Series, Data Structures - Tata Mcgraw – Hill - New Delhi.

Web Reference

1. <https://www.wiziq.com/>
2. www.geeksforgeeks.org/data-structures/

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

NME 2 - BASICS OF BUSINESS INSURANCE

SUBJECT CODE : 16UNME02P	THEORY	MARKS : 100
SEMESTER : II	CREDITS : 2	TOTAL HOURS: 30

Common to B.Com (A&F), B.Com (MM), B.Com (BM) and BBA

COURSE OBJECTIVE:

- To introduce students to the field of insurance
- To emphasize the importance of insurance for business enterprises.

Unit – I

Introduction to Insurance – Type of Insurance – Principles of Insurance. **(6 Hours)**

Unit – II

Salient features of IRDA Act – Administration of IRDA Act – Regulatory measures of IRDA **(6 Hours)**

Unit – III

Life insurance products – Term, Whole life, Endowment. **(6 Hours)**

Unit – IV

Introduction to general Insurance – fire, marine and motor insurance. **(6 Hours)**

Unit – V

Government and insurance companies – LIC India- private players in Insurance in India. **(6 Hours)**

Prescribed Texts:

1. Dr.N.Premavathy – Elements of Insurance, Sri Vishnu Publications, Chennai.
2. Dr.A.Murthy – Elements of Insurance, Margham Publications, Chennai
3. M.N.Mishra – Insurance, Principles and practice, S.Chand& Co. Ltd., New Delhi

Reference Books

1. Nalini Prava Tripathy, PrabirPaal – Insurance Theory & Practice, Prentice Hall of India
2. Anand Ganguly – Insurance Management, New Age International Publishers.

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	ESSAY Answer ANY 5 out of 10 questions (each in 1200 words)	1-10	20	100
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	2	

SEMESTER - III

CORE – 5 - MARKETING MANAGEMENT

SUBJECT CODE : 16UISMC05	THEORY	MARKS : 100
SEMESTER : III	CREDITS : 4	TOTAL HOURS: 75

Common to (B.Com (MM), B.Com (BM), B.Com (A&F), B.B.A)

COURSE OBJECTIVES:

- To understand the role and importance of marketing.
- Identify the factors influencing consumer behavior and purchase decision
- To understand the facets of 4 P's in marketing
- To understand the modalities of sales distribution and control

UNIT I

Fundamentals of marketing - Role of Marketing - Relationship of Marketing with other functional areas - concept of marketing mix-Marketing approaches - Various Environmental factors affecting the marketing functions.

(10 Hours)

UNIT II

Buyer Behavior - Consumer goods and Industrial goods - Buying motives - Factors influencing buyer Behavior, Market segmentation - Need and basis of Segmentation -Targeting - positioning.

(10 Hours)

UNIT III

The Product - Characteristics - benefits - classifications - consumer goods - industrial goods - New Product Development process - Product Life Cycle - Branding –Packaging- Labeling– Pricing: Meaning, Objectives and Types of Pricing.

(20 Hours)

UNIT IV

Promotion –Meaning, Objectives – Types - A brief overview of: Advertising - Publicity - Public Relations - personal Selling - Direct selling and Sales promotion.

(20 Hours)

UNIT V

Physical Distribution: Importance – Channels of Distribution: Distribution of consumer goods, Distribution of industrial goods and Distribution of Agriculture goods – Levels of channels: Zero level, one level, two level and three level channel - distribution issues

(15 Hours)

Prescribed Texts:

1. Marketing Management by Sontakki C.N; Kalyani Publishers; 2009
2. R.S.N. Pillai and Bagavathi, Modern Marketing, S.Chand& Co, New Delhi.
3. Jayasankar, Marketing, Margham publications, Chennai.

Reference Books:

1. Philip Kotler, 2003, Marketing Management, 11th edition, Pearson Education (Singapore) Pt Ltd, New Delhi.
2. Crrain field, Marketing Management, Palgrave Macmillan

Web Reference:

1. <http://www.marketing91.com/marketing-management/>
2. <https://www.managementstudyguide.com/marketing-management-articles.htm>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (Each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 6 – COST ACCOUNTING

SUBJECT CODE : 16UISMC08	THEORY & PROBLEMS	MARKS : 100
SEMESTER : III	CREDITS : 4	TOTAL HOURS: 90

(Common to B.Com (BM), B.Com (MM))

COURSE OBJECTIVES:

- To acquaint the students with basic concepts used in cost accounting.
- To introduce various methods involved in cost ascertainment and cost accounting book keeping systems.

UNIT I

Introduction to Cost accounting-Meaning, definition, scope and objectives of cost accounting, Cost accounting Vs. Financial accounting- Difference between Cost accounting and Management accounting – Requisites of good costing system.

(10 Hours)

UNIT II

Elements of cost – Classification of overheads- cost sheet- Cost Sheet Vs. production statement-Stock of Raw materials – Specimen cost sheet with inventories- Tenders and quotations.

(15 Hours)

UNIT III

Meaning of material control – Essentials, objectives, advantages- Store keeping and inventory control-Economic Ordering Quantity (EOQ)- pricing of material issues (LIFO,FIFO, Simple Average and Weighted Average method) material losses.

(25 Hours)

UNIT IV

Computation and control of labour – Labour turnover –Time keeping department – Payroll department-Remuneration and incentives – Time rate system, Piece rate system – Premium and bonus plan.

(20 Hours)

UNIT V

Meaning and definition - Importance-Classification – Primary Distribution of overheads, Secondary distribution of overheads – Absorption of overheads - calculation of Machine hour rate.

(20 Hours)

Prescribed Text

1. T.S. Reddy and Y. Hariprasad Reddy – Cost Accounting ; Margham Publications
2. N.K. Prasad and V.K. Prasad – Cost Accounting

Reference Books:

1. Jain S.P. and Narang K.L. – Cost Accounting.
2. Khanna B.S., Pandey I.M. Ahuja G.K. and Arora M.N. – Practical costing.

Web Reference:

1. <http://www.accountingcoach.com/>
2. <https://www.wiziq.com/tutorials/cost-accounting>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	1	1
	Unit – 4	1	1
	Unit – 5	2	1
Section B	Unit – 1	1	
	Unit – 2	1	1
	Unit – 3		1
	Unit – 4		2
	Unit – 5		2
Section C	Unit – 1		
	Unit – 2		1
	Unit – 3		1
	Unit – 4		1
	Unit - 5		1

CORE – 7 - PROGRAMMING IN ‘C’

SUBJECT CODE : 16UISMC06	THEORY	MARKS : 100
SEMESTER : III	CREDITS : 4	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

- To brief basic concepts of algorithms, flowcharting, pseudo code and programming in C
- Give them an insight into C techniques.
- To create and solve modular programs.

UNIT I

C fundamentals - Character set - Identifiers and keywords – Basic Data types- User defined Data types - Constants - variables - Declaration - Expressions - Statements - Operators - Arithmetic, Unary, relational, Logical, Assignment and conditional Operator- Library functions.

(15 Hours.)

UNIT II

Input/output functions-Printf function- Scanf function - Simple C programs - Flow of control -Control structures –If statement, If Else Statement, Nested If Statement, Else If Ladder, While Statement, Do-While Statement, For Loop, Switch Case, break, continue, go to statements - Comma Operator.

(20 Hours.)

UNIT III

Functions - Defining, Declaration, accessing functions - Function prototypes - Passing arguments to functions-Call by Value- Call by reference - Recursion - Storage classes- Private- Public- Automatic- Extern- Static storage classes. - String functions.

(15 Hours.)

UNIT IV

Arrays - Definition and Declaration - Passing arrays to function – Array Types- Onedimensional array- Two-dimensional arrays- Multidimensional arrays - Arrays and string Structures Pointers – Definition- Declaration, Operations on pointers, passing pointers to functions, Pointers and arrays

(20 Hours.)

UNIT V

Introduction to files – Definition- Declaration- Reading from a file – Writing into a file- File Opening- File Closing-File Saving-File Editing and Updating Operations.

(20 Hours.)

Prescribed Texts:

1. Programming in C by E.Balaguruswamy; Tata Mc Graw Hill Publication; 2008
2. Programming in C by V. Rajaraman; Prentice Hall, New Delhi; July 2006

Reference Books:

1. Gottfried B.S - Programming with C - second edition TMH Pub. Co. Lt., - New Delhi – 1996
2. Kanetkar Y - : Let us C - BPB Pub. - New Delhi – 1999
3. E. Balagurusamy - Programming in ANSI C

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	1	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 8 - PROGRAMMING IN 'C' PRACTICAL

SUBJECT CODE : 16UISMC07P	PRACTICAL	MARKS : 100
SEMESTER : III	CREDITS : 4	TOTAL HOURS: 75

COURSE OBJECTIVE:

➤ To enable students to learn practical programming in C.

1. To find max and min of numbers
2. To generate Fibonacci series
3. Simple Interest
4. Compound Interest
5. Factorial with and without recursion
6. Sum of n natural numbers
7. Matrix addition and subtraction
8. Matrix Multiplication
9. Sorting – bubble sort
10. Prime number check
11. Odd or Even Number
12. Reverse a string and check for palindrome
13. Counting the number of vowels, consonants, words and white spaces in a line of text
14. Linear Search
15. Array addition/Subtraction
16. Swapping of variables using pointers

ALLIED: 3 BUSINESS STATISTICS AND OPERATION RESEARCH -I

SUBJECT CODE: 16UMATA18	THEORY & PROBLEM	100 MARKS
SEMESTER: III	CREDITS: 5	NO. OF HOURS PER WEEK: 6

(COMMON TO B.B.A, B.COM (BM) AND B.COM (MM))

COURSE OBJECTIVE:

- To introduce basic concepts of statistics and understand the statistical techniques used for business data analysis.
- To give an insight into operation research techniques used in business for critical decision making.

UNIT –I

Introduction to statistics: Definition, Scope and limitation of statistics – Collection of Data: Meaning, types of data – Classification of data: Types of classification-Frequency Distribution-Tabulation of data: Components of table – Formation of frequency table Diagrammatic and graphical representation of data: Simple bar diagram, Multiple bar diagram, subdivided bar diagram, Deviation bar diagram, Histogram, Pie diagram - Measures of Central tendency: Mean, median and mode.

(10 Hours.)

UNIT – II

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation – Measures of Skewness.

(20 Hours.)

UNIT – III

Correlation – Karl Pearson’s Coefficient of Correlation – Spearman’s Rank Correlation – Regression Lines and Coefficients.

(25 Hours.)

UNIT – IV

Introduction to OR: Definition, Applications of OR, Techniques or tools of OR – LPP model formulation– Graphical and Algebraic Solution. **(Simple Problems only)**

(17 Hours.)

UNIT – V

Network Analysis - PERT and CPM (no crashing) **(Simple Problems only)**

(18 Hours.)

Prescribed Text:

1. Statistical Methods – S.P. Gupta, Sultan 2000.
2. Introduction to Operations Research – Dr. P.R. Vittal, Margham Publications

Reference Books:

1. Statistics - Elhance
2. Operations Research – Hira and Gupta, S. Chand.
3. Operations Research – Handy and A. Taha, Macmillan Publishers.

Web Reference

1. <https://www.easycalculation.com/tutorial.php>
2. <http://people.brunel.ac.uk/~mastjjb/jeb/or/contents.html>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	1
	Unit – 2	1	2
	Unit – 3	1	1
	Unit – 4	2	
	Unit – 5	1	1
Section B	Unit – 1	2	
	Unit – 2		2
	Unit – 3		1
	Unit – 4	1	
	Unit – 5		1
Section C	Unit – 1		1
	Unit – 2		1
	Unit – 3		1
	Unit – 4		
	Unit - 5		

SEMESTER - IV

CORE 9– FUNDAMENTALS OF DATABASE CONCEPTS

SUBJECT CODE: 16UISMC11	THEORY	100MARKS
SEMESTER: IV	CREDITS: 4	NO. OF HOURS PER WEEK: 5

Common to B.Com (MM)

COURSE OBJECTIVES:

After Studying this course, the students should be able to:

- Develop an understanding of the classic data models in Database
- Become familiar with the concepts of managing databases.
- Implement a DBMS
- Learn new ways to model data

UNIT-I

Database Concepts - Database System Applications - Data Models -Database Languages - Database users and Administrator - Transaction Management - Database system structure - Application Architecture.

(15 Hours.)

UNIT-II

Database System Architecture, Centralized and Client Server architecture, Server system architecture, parallel system, distributed systems, Network types.

(15 Hours.)

UNIT-III

Transactions-concept-transaction state-Implementation of Atomicity and Durability-concurrent executions-serializability-recoverability

(15 Hours.)

UNIT-IV

Concurrency control-lock based protocol-timestamp-based protocol-validation based protocol-deadlock handling

(15 Hours.)

UNIT-V

Recovery System- Failure classification-storage structure-recovery and atomicity-log based recovery.

(15 Hours.)

Prescribed Text:

1. Abraham Silberschatz, Henry F. Korth, S. Sudarshan, "Database System Concepts", McGrawHill, 5th Edition

Reference Books:

1. Silberschatz Korth Sudarshan Database System Concepts, , McGraw – Hill 4th Edition 1988
2. Distributed Databases: Concepts and Systems by Stefano Ceri **Web**

Reference:

1. www.tutorialspoint.com/dbms/
2. www.studytonight.com/dbms

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	10	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 10 - OOPS with C++

SUBJECT CODE: 16UISMC09	THEORY	100MARKS
SEMESTER: IV	CREDITS: 4	NO. OF HOURS PER WEEK: 5

COURSE OBJECTIVE:

- This course covers object-oriented programming principles and techniques using C++. The aim is to help students to gain a better understanding of OO design and program implementation by using Object Oriented language features.

Unit – I

Principles of Object Oriented Programming (OOP) – Software Crisis- Software Evaluation - OOP Paradigm - Basic Concepts of OOP - Benefits of OOP- Object oriented Languages - Application of OOP- Scope Resolution Operator- Structure of C++ program- A simple C++ program.

(15 Hours.)

Unit – II

Introduction to C++ - Tokens - Keywords - Identifiers – Variables- Constants- Basic Data types- User-defined Data types - Operators - Manipulators - Expressions and their Types- Control Structures - Pointers - Functions - Function Prototyping Parameters Passing in Functions - Values Return by Functions - Inline Functions - Friend and Virtual Functions.

(15 Hours.)

Unit – III

Classes and Objects – Introduction- Defining Member Functions - C++ program with Classes- Arrays within class- arrays of objects- Private Member functions- Static Member Functions- Constructors- Parameterized constructors- Multiple constructors- Copy constructors-Dynamic Constructors- Destructors.

(15 Hours.)

Unit – IV

Operator overloading - Type Conversions - Function Overloading- Inheritance - Types of Inheritance- Single – Multiple- Multilevel- Hierarchical-Hybrid - Virtual Functions and Polymorphism – this keyword.

(15 Hours.)

Unit – V

Exception Handling – try, try – catch, try - catch finally, throws exception.

(15 Hours.)

Prescribed Texts:

1. E. Balagurusamy - Object Oriented Programming with C++ - TMH.
2. Robert Lafore - Object Oriented Programming in Microsoft C++ - Galgotia.

Reference Books:

Object Oriented Programming Using C++ and Java Paperback – 2011 by RameshVasappanavara

Web Reference:

1. www.w3schools.in/cplusplus/intro/

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions	13-20	8	40
C	(each in 300 words) Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 11 - OOPS with C++PRACTICAL

SUBJECT CODE: 16UISMC10P	PRACTICAL	100 MARKS
SEMESTER: III	CREDITS : 4	NO. OF HOURS PER WEEK:

COURSE OBJECTIVE:

➤This course covers object-oriented programming principles and techniques using C++. The aim is to help students to gain a better understanding of OO design and program implementation by using Object Oriented language features.

1. Practical on simple C++ programs.
2. Practical based on concept of object-oriented programming.
3. Function overloading
4. Operator overloading
5. Friend functions
6. Inline functions
7. Practical on use of classes, objects in C++
8. Exception handling
9. Single Inheritance
10. Multiple Inheritance.

CORE 12 – RESEARCH METHODS IN BUSINESS

SUBJECT CODE: 16UISMC12	THEORY	100 MARKS
SEMESTER: IV	CREDITS: 4	NO. OF HOURS PER WEEK: 5

(Common to B.Com MM)

COURSE OBJECTIVE:

- To make students aware about the importance of research in business
- To make students acquire skills to locate problem areas in organisation settings, and plan, organize, design, and conduct research to help solve the identified problems.

Unit I

Fundamentals of Research: Meaning, Objectives and Significance. Types of Research: - Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical. **Approaches to Research-** Quantitative approach, Qualitative approach.

(15 Hours.)

Unit II

Defining the research problem, selecting the problem; technique involved in selecting a problem. Research design – Meaning, need, features of good research design. **Sample design** – Meaning- Steps in sampling design – Characteristics of Good Sample Design –Classification of Sampling design: Brief about Probability sampling, Non- probability sampling, restricted, unrestricted sampling. Types: Quota sampling, Cluster sampling, Area sampling, Multi stage sampling, convenience sampling and purposive sampling.

(20 Hours.)

Unit III

Sources and Methods of data collection - Primary and Secondary data. Meaning and Definition of Primary sources - Observation, Interview and Questionnaire. Meaning and definition of Secondary sources - Data processing – Tabulation – Data analysis and Interpretation.

(15 Hours.)

Unit IV

Meaning, definition and importance of Hypothesis –Types: Simple hypothesis, Null hypothesis, alternate hypothesis and complex hypothesis. Formulation of hypothesis and various methods of testing of hypothesis - (Theoretical explanation only)Chi-square test, Correlation Coefficient and Regression analysis.

(15 Hours.)

Unit V

Report writing – layout of research report – Steps in report writing- Importance of research in management decisions- Application of research in various areas - Marketing Research, Government policies and economic systems, Social relationship.

(10 Hours.)

Prescribed Texts:

1. Research Methodology by Dr.P.Ravilochanan– Margham Publications (2012)
2. Research Methodology: Methods and Techniques Paperback – Abridged, Audio book, Box set by C R Kothari

Reference Books:

1. Research Methodology: A Step by Step Guide for Beginners, 2e – 2005 –by Ranjit Kumar – Pearson.

Web Reference:

1. <http://study.com/academy/lesson/research-methodology-approaches-techniquesquiz.html>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions	13-20	8	40
C	Essay (each in 300 words Answer any 2 out of) 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	
	Unit – 2	3	
	Unit – 3	3	
	Unit – 4	2	
	Unit – 5	2	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1		
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit – 5	1	

ALLIED: 4 BUSINESS STATISTICS AND OPERATION RESEARCH. -II

SUBJECT CODE: 16UMATA24	THEORY & PROBLEM	100 MARKS
SEMESTER: IV	CREDITS: 5	TOTAL HOURS: 90

Common to B.B.A, B.Com (BM) , B.Com (MM)

COURSE OBJECTIVE:

- To introduce basic concepts of statistics and understand the statistical techniques used for business data analysis.
- To give an insight into operation research techniques used in business for critical decision making.

UNIT –I

Time Series Analysis – Secular trend: Graphic or free hand method, Method of semi average, Moving average and Method of least squares-Seasonal variation: Method of simple average only.

(15 Hours.)

UNIT – II

Index Numbers: Simple aggregative, simple average of price relative method, weighted average of price relative method and weighted aggregative method – Fixed and Chain base Index – Cost of Living Index.

(15 Hours.)

UNIT –III

Probability – Addition and Multiplication Theorem – Sampling Techniques – Types of Sample and Sampling procedures – Tests of Significance – t, Chi –square test only. (Simple problems).

(20 Hours.)

UNIT – IV

Assignment Problems: Minimisation, Maximisation case in assignment problem. Travelling sales man problem, unbalanced assignment problem.

(20 Hours.)

UNIT –V

Transportation Problems: North West Corner Method (NWCM) – Lowest Cost Entry Method (LCM), Vogel's Approximation Method (VAM) and MODI Method.

(20 Hours.)

Prescribed Texts:

1. Statistical Methods – S.P. Gupta, Sultan 2000.
2. Introduction to Operations Research – Dr. P.R. Vittal, Margham Publications

Reference Books

1. Statistics - Elhance
2. Operations Research – Hira and Gupta, S. Chand.
3. Operations Research – Handy and A. Taha, Macmillan Publishers

Web Reference

1. <https://www.easycalculation.com/tutorial.php>
2. <http://people.brunel.ac.uk/~mastjib/jeb/or/contents.html>

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	1
	Unit – 2	1	2
	Unit – 3	1	1
	Unit – 4	1	1
	Unit – 5	1	1
Section B	Unit – 1		1
	Unit – 2		2
	Unit – 3		1
	Unit – 4	1	1
	Unit – 5	1	1
Section C	Unit – 1		1
	Unit – 2		1
	Unit – 3		1
	Unit – 4		1
	Unit - 5		

SKILL: 4 QUANTITATIVE APTITUDES

SUBJECT CODE: 16UGSLS05	PROBLEM	100 MARKS
SEMESTER: IV	CREDITS: 2	NO. OF HOURS PER WEEK: 2

COURSE OBJECTIVE:

- To make students familiarize in quantitative aptitude.
- To train students to face competitive exams and other entrance level tests conducted as part of recruitment drive by employers both in public and private sector.

Unit-1

Divisibility – HCF and LCM – Decimal Fractions

Unit-II

Averages – Percentage – Ratio and Proportions

Unit-III

Time and work – Time and Distance

Unit-IV

Simple Interest – Compound Interest – Profit and Loss

Unit-V

Area – Volume and surface Areas

Prescribed Text

1. R.S. Aggarwal, Quantitative Aptitude, S. Chand & Company, New Delhi, 2012

Reference Books

1. Govind Prasad Singh and Rakesh Kumar, Text Book of Quickest Mathematics (for all Competitive Examinations), Kiran Prakashan, 2012
2. R.S. Aggarwal, Objective Arithmetic, S. Chand & Company, New Delhi , 2005

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	50 MCQs	1-50	2	100
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of
		Problems
Section A	Unit – 1	10
	Unit – 2	10
	Unit – 3	10
	Unit – 4	10
	Unit – 5	10

SEMESTER - V

CORE: 13 MANAGEMENT INFORMATION SYSTEM

SUBJECT CODE: 16UISMC13	THEORY	100 MARKS
SEMESTER: V	CREDITS: 4	TOTAL HOURS: 90

Common to B.B.A

COURSE OBJECTIVE:

- To emphasize the importance of information system in today's world.
- To create an understanding about the importance and implications of information system in business.

UNIT I

Definition of Management Information System - MIS support for planning, Organizing and controlling - Structure of MIS - Information for decision - making.

(15Hours.)

UNIT II

Concept of System - Characteristics of System - Systems classification - Categories of Information Systems - Strategic information system and competitive advantage

(18 Hours.)

UNIT III

Computers and Information Processing - Classification of computer - Input Devices - Output devices - Storage devices, - Batch and online processing. Hardware - Software. Database management Systems.

(18 Hours.)

UNIT IV

System Analysis and design - SDLC - Role of System Analyst - Functional Information system - Personnel, production, material, marketing.

(20 Hours.)

UNIT V

Decision Support Systems - Definition. Group Decision Support Systems - Business Process Outsourcing - Definition and function

(19 Hours.)

Prescribed Text:

1. Sadagopan , "Management Information Systems" - Prentice- Hall of India
2. CSV Murthy -"Management Information Systems" Himalaya publishing House.

Reference Books:

1. Mudrick&Ross , "Management Information Systems", Prentice - Hall of India
- 2.. Dr. S.P. Rajagopalan , "Management Information Systems and EDP " , Margham Publications , chennai .

Web Reference:

1. www.tutorialspoint.com/management_information_system
2. http://www.academia.edu/4246296/Management_Information_Systems_Tutorial

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
s Section A	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	3	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	1	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 14 – FINANCIAL MANAGEMENT

SUBJECT CODE: 16UISMC14	THEORY	100 MARKS
SEMESTER: III	CREDITS: 4	NO. OF HOURS PER WEEK: 6

Common to B.B.A

COURSE OBJECTIVES:

- To appreciate the role of the finance in an organization.
- To identify sources from where funds can be raised keeping in mind the cost and risk involved.
- To familiarize the students the techniques to be employed for investing the funds, taking into consideration the risk and the return.

UNIT I

Meaning, objectives and Importance of Finance – Sources of finance – Functions of financial management – Role of financial manager in Financial Management.

(15 Hours.)

UNIT II

Capital structures planning - Factors affecting capital structures – Determining Debt and equity proportion – Theories of capital structures – Leverage concept.

(20 Hours.)

UNIT III

Cost of capital – Cost of equity – cost of preference capital – Cost of debt – Cost of retained earnings – weighted Average (or) composite cost of capital (WACC)

(20 Hours.)

UNIT IV

Dividend policies – Factors affecting dividend payment - Company Law provision on dividend payment –Various Dividend Models (Walter’s Gordon’s – M.M. Hypothesis)

(18 Hours.)

UNIT V

Working capital – components of working capital – working capital operating cycle – Factors influencing working capital – Determining (or) Forecasting of working capital requirements.

(17 Hours.)

Prescribed Texts

1. Financial Management – Dr. A. Murthy – Margaham Publications
2. Financial Management – S.N. Maheswari

Reference Books:

1. Financial Management - I.M. Pandey
2. Dalston L. Cecil, Financial Management, Learn Tech press, Trichy, 2nd Edition 2015
3. Financial Management – Prasanna Chandra
4. Financial Management – Y. Khan and Jain

Web Reference

1. <http://fpacert.afponline.org/Ref/>
2. <http://www1.worldbank.org/publicsector/pe/oecdpehandbook.pdf>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 6 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	1	2
	Unit – 4	1	1
	Unit – 5	3	
Section B	Unit – 1	1	
	Unit – 2	1	1
	Unit – 3		2
	Unit – 4	1	1
	Unit – 5		1
Section C	Unit – 1	1	
	Unit – 2		1
	Unit – 3		
	Unit – 4		1
	Unit - 5		1

CORE 15: WEB TECHNOLOGY

SUBJECT CODE: 16UISMC15	THEORY	100 MARKS
SEMESTER: V	CREDITS: 4	NO. OF HOURS PER WEEK: 5

COURSE OBJECTIVES:

➤The course aims to introduce fundamental concepts of web applications using ASP.NET.

UNIT I

ASP.NET Basics- ASP.NET Language structure- Page structure-Page load event- Page unload event- IsPostBack property- IsValid property- Compiler directives-@Page directive- @Import directive- @OutputCache directive- Basic web server controls (Label, TextBox, Button, LinkButton, CheckBox, RadioButton, HyperLink, Image Controls).

(18 Hours)

UNIT II

Server controls- Anchor Control- Table - Form and Form Input Controls- InputFile Control- DataList Web Server Controls- CheckBoxList Control- RadioButtonList Control- Drop Down List Control- List Box Control- Data Grid Control- Repeater Control- Other Web Server Controls- Calendar Control- AdRotator Control- Validation Controls(RequiredFieldValidator, Compare Validator, Range Validator, Custom Validator, Validation Summary Control).

(12 Hours)

UNIT III

Request Object- Query String Collection- Form Collection- Browser Object- Server Variables Collection- Accept Types Collection- Headers Object- Visitor and Referrer Information- Save As Method- Response Object- Cookies- Working With Data- System. Data and System .Data. OleDb Namespaces- OleDb Connection Class- OleDb Command Classes- OleDb Transaction Class- OleDb Data Adapter Class- Data Set Class.

(15 Hours)

UNIT IV

System .Data .SQL Client Namespace- Connecting to a SQL Server Database- Manipulating Data in a Server Database-Retrieving Data from a SQL Server Database. Advanced Issues- E-mail- Sending a sample E-mail message- SmtP Mail and Mail Message Classes- Attaching a File- Sending an HTML E-mail Message- File Request Sample Site Page- Product Info Sample Site Page.

(15 Hours)

UNIT V

Application Issues- Creating on Asp.NET Application- Maintaining Session State- Maintaining Session State- Application and Session Objects Sample Application- Working with IIS Page Directives- WWW Service Properties- Web Sites within IIS- Error Handling- Resume Next- On Error Go to Try/Catch Code Block- Security- Authentication Control- IP Address- Secure Communication Through SSL- Client Certificates.

(15 Hours)

Prescribed Texts:

1. ASP.NET Developers Guide by Greg Buczek; Tata Mc Graw Hill Publication;

Reference Books:

1. Beginning ASP.NET 4.5.1 in C# and VB Paperback – 22 May 2014 by Imar Spaanjaars

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Sections	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	3	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	2	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	1	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 16 –WEB TECHNOLOGY PRACTICAL

SUBJECT CODE: 16UISMC16P	PRACTICAL	100 MARKS
SEMESTER: V	CREDITS : 4	NO. OF HOURS PER WEEK:

COURSE OBJECTIVES:

➤The course aims to introduce fundamental concepts of web applications using ASP.NET practically

1. Write an Asp.Net program to implement link button control.
2. List the headers sent by the Request Objects.
3. Implement Request and Response object using Asp.Net.
4. Create a Login form using Asp.Net.
5. Load a webpage whenever a mouse moves over a link.
6. Create a web page Image with mouse event.
7. Create an employee database using Asp.net controls.
8. Create on line library using calendar.
9. Check in and Checkout program using Asp.net.
10. Create a web page using student database.

**ELECTIVE 1: INTER DISCIPLINARY ELECTIVE
ESSENTIALS OF OFFICE AUTOMATION TOOLS AND E-MAIL ETIQUETTE**

SUBJECT CODE :	PRACTICAL	MARKS : 100
SEMESTER : V	CREDITS : 5	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

- This course will equip students to familiarize with office automation tools practically and help them understand the importance and intricacies of E-Mail Etiquette.

UNIT I

Word Processing: - Creation of documents, Editing, formatting and printing documents, using tools such as spelling check, thesaurus, etc., in word processors (MS Word), Formatting with pictures, mail merge, use of references tools, document style management, change tracking, custom template creation.

(15 Hours)

UNIT 2

Electronic Spreadsheet, Structure of spreadsheet Concept of absolute and relative cell reference; using graphics and formatting of worksheet; Managing multiple panes and windows

(15 Hours)

UNIT 3

Advanced spreadsheet functions: built in functions, statistical and mathematical functions, Data Validation tool, pivot table and charting, Goal seeking and solver tools

(20 Hours)

UNIT 4

Creation of presentation using presentation tools such as MS-power point. Designing master slides, custom layouts, use of timer and animation for effective presentation

(20 Hours)

UNIT 5

Creation of E-Mail ID, drafting of formal and informal e-mails, importance of CC and BCC, essentials of e-mail etiquette.

(20 Hours)

Prescribed Text:

1. A first Course in Computers, Sanjay Saxena, Vikas Publishing House Pvt. Ltd.,
2. Teach yourself, MS Office for Windows, Corey Sandler, Tom Bedgelt, Jan Weingarten, BPB Publication.

Reference Text

1. Internet Complete Reference-Margret Levine Young-Millennium edition-TMGH 2001

Web Reference:

1. www.w3schools.com

SEMESTER - VI

CORE 17– E- BUSINESS

SUBJECT CODE : 16UISMC17	THEORY	MARKS : 100
SEMESTER : VI	CREDITS : 4	No. OF HOURS PER WEEK : 6

Common to B.B.A, B.Com(MM)

COURSE OBJECTIVES:

- This course provides a foundation to prepare students, to play leading roles in the application and management of e-business system construction.

UNIT I

Definition of E-Business, Origin of E- Business, History of the Internet, E- Business Opportunities for Businesses, Working of E- Business, E- Business Vs the Traditional Business Mechanism, Advantages of E- Business, Disadvantages of E- Business, Main Goals of E- Business. Network Infrastructure for E- Business -Local Area Network (LAN), Metropolitan Area Network (MAN) Protocols, Wide Area Network (WAN).

(20 Hours)

UNIT II

The Internet – Intranet and Extranet – Common Gateway Interface – Need for intelligent website – Types of Security Threats: Hacking, e-mail impersonation, denial of service attack, phishing, virus and worms. Types of protection mechanisms: data and message security and firewalls, cryptography -encryption, decryption, digital signature and virtual private network.

(15 Hours)

UNIT III

Internet payment systems: Features of payment methods, electronic money, payment gateway, SET protocol for credit card payment, electronic payment media: e-cash, e-wallet, echeck, credit card, debit card, smart card, EFT and ACH

(15 Hours)

UNIT IV

Business to Business e-commerce: Meaning, benefits and opportunities in B2B, B2B building blocks and their relationship to supply chain management, key B2B models and their main functions Consumer oriented e-commerce: traditional retailing and e-retailing, benefits and key success factors for e-retailing, models for e-retailing like specialized and generalized e- stores, e-mall, direct selling by manufacturer, matchmaking services, information selling on the web, entertainment services and e-auction services.

(20 Hours)

UNIT V

Overview of M-Commerce – Definition and working of Wireless Application Protocol (WAP), Generations of Mobile Wireless Technology, Components of Mobile Commerce, Networking Standards for Mobiles

(20 Hours)

Prescribed Text:

1. E-Commerce – A Managerial Perspective- Prentice Hall- Joseph PT
2. The Complete Idiot's Guide to E-Commerce – Smith Rob, Thompson Mark – Year 2000

Reference Books

1. Kosiv, David - Understanding E-Commerce
2. Garry P Schneider and James T Perry - Electronic Commerce, Course technology, Thomson Learning, 2000
3. Diwan, Prag and Sunil Sharma - E-Commerce - Managers guide to E-Business

Web Reference:

1. www.tutorialspoint.com/e_commerce/
2. www.ecommercetutorial.net

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

CORE 18: ENTREPRENEURIAL DEVELOPMENT

SUBJECT CODE: 16UISMC18	THEORY	100 MARKS
SEMESTER: VI	CREDITS: 4	NO. OF HOURS PER WEEK: 5

Common to B.B.A. B.Com (MM), (BM), B.Com (A & F)

COURSE OBJECTIVE:

- To create awareness among students about entrepreneurship and its importance.
- To keep the students informed about various financial institutions that promote ED.
- To encourage students to become entrepreneurs.

UNIT I

Concept of Entrepreneurship - Entrepreneurship – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Functions of Entrepreneurs.

(13 Hours)

UNIT II

Entrepreneurial Development Agencies. - Commercial Banks – District Industries Centre – National Small Industries Corporation – Small Industries Development Organisation – Small Industries Service Institute. All India Financial Institutions – IDBI – IFCI – ICICI – IRDBI

(20 Hours)

UNIT III

Project Management - Business idea generation techniques – Identification of Business opportunities – Feasibility study – Marketing, Finance, Technology & Legal Formalities - Preparation of Project Report – Tools of Appraisal.

(15 Hours)

UNIT IV

Entrepreneurial Development Programmes (EDP) – Role, relevance and achievements – Role of Government in organizing EDPs – Critical evaluation.

(12 Hours)

UNIT V

Economic development and entrepreneurial growth - Role of entrepreneur in economic growth – Strategic approaches in the changing Economic scenario for small scale Entrepreneurs Networking, Niche play , Geographic Concentration, Franchising / Dealership – Development of Women Entrepreneurship.

(15 Hours)

Prescribed Text:

1. Jayashree Suresh – Entrepreneurial development
2. Dr. C.B. Gupta & Dr. S.S. Khanka – Entrepreneurship and Small Business.

Reference Books:

1. Srinivasan N.P. – Entrepreneurial Development
2. Saravanavel – Entrepreneurial Development
3. Vasant Desai – Project management
4. Holt – Entrepreneurship – New Venture Creation
5. J.S. Saini & S.I. Dhameja – Entrepreneurship and small business.

Web Reference:

1. www.inderscience.com/jibed
2. <http://www.slideshare.net/balajisetty/entrepreneurship-development-8886110>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	1	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit – 5		

CORE 19 –HUMAN RESOURCE MANAGEMENT

SUBJECT CODE : 16UISMC19	THEORY	MARKS : 100
SEMESTER : VI	CREDITS : 4	No. OF HOURS PER WEEK : 6

Common to B.B.A. B.Com (MM), (BM) (A&F)

COURSE OBJECTIVES:

- To understand the nature of human resources and its significance to the organization.
- To familiarise students with the various techniques in HRM that contribute to the overall effectiveness of an Organization.
- To bring to the attention of the students the latest trends in managing human resources in an organization.

UNIT I

Nature and scope of Human Resources Management – Differences between personnel management and HRM – Environment of HRM – Human resource planning – Recruitment – Selection – Methods of Selection – Uses of various tests – interview techniques in selection and placement.

(20 Hours)

UNIT II

Induction – Training – Methods – Techniques – Identification of the training needs – Training and Development – Performance appraisal – Transfer – Promotion and termination of services – Career development.

(20 Hours)

UNIT III

Remuneration – Components of remuneration – Incentives – Benefits – Motivation – Welfare and social security measures.

(15 Hours)

UNIT IV

Labour Relation – Functions of Trade Unions – Forms of collective bargaining Workers' participation in management – Types and effectiveness.

(20 Hours)

UNIT V

Industrial Disputes and Settlements (Laws Excluded) – Settling Industrial Disputes in India

(15 Hours)

Prescribed Texts:

1. Essentials of Human Resource Management and Industrial Relations- P.SubbaRao – Himalaya Publishing House- 2010
2. Human Resource Management – L M Prasad- Third Edition Reprint 2014 – Sultan Chand & Sons.
3. Human Resource Management – Ashwathappa -5th Edition – McGraw Hill

Reference Books

1. Human Resource Management – Garry Deseler -11th Edition – Pearson International
2. Human Resource Management- By DrCharmine E.J. Härtel, Dr Yuka Fujimoto–
2nd Edition **Web**

Reference:

1. <https://www.wiziq.com/tutorials/human-resource-management>
2. <https://www.sophia.org/tutorials/introductory-human-resource-concepts>

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	2	
	Unit – 3	1	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	2	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5	1	

ELECTIVE 2 –SOFTWARE PROJECT MANAGEMENT

SUBJECT CODE : 16UISME02	THEORY	MARKS : 100
SEMESTER : VI	CREDITS : 4	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

- The aim is to introduce the subject of Software Project Management to the students and make them aware of what is project and how to handle the Project.
- This course also gives concepts to the students about the decisions and actions related to planning, organizing, leading and controlling programs and projects.

UNIT I

Introduction to Software Project Management- Software project versus other types of project-problems- management control- Stakeholders- Requirement Specification – Information and control in organizations Introduction to step wise project planning- Select-identify scope and objective sidentify project infrastructure- Analyse project characteristics- products and activities- Estimate effort for each activity- Identify activity risks- Allocate resources- Review/ publicize plan- Execute plan and lower levels of planning. Project evaluation- Introduction – Strategic assessment- technical assessment - cost benefit analysis- cash flow forecasting- cost- benefit evaluation techniques- risk evaluation

(20 Hours)

UNIT II

Selection of an appropriate project approach- choosing technologies-technical plan contents list-choice of process models- structured methods-rapid application development- waterfall model - process model-spiral model - software prototyping- ways of categorizing prototypes- incremental delivery- selecting process model.

(15 Hours)

UNIT III

Software effort estimation- introduction where- problems with over and under estimates- basis for software estimating software effort estimation technique- expert judgement- Albercht function point analysis- COCOMO -Activity Planning- Objectives- Project schedules projects and activities-sequencing and scheduling activities

(15 Hours)

UNIT IV

Network planning models- formulating a network model- using dummy activities- representing lagged activities- adding time dimension- forward pass- backward pass - identifying the critical path- Activity float- shortening project duration – identifying critical activitiesprecedence networks

(20 Hours)

UNIT V

Risk Management- nature of risk- managing- identification-analysis reducing risks.

(20 Hours)

Prescribed Text:

1. Software Project Management – By Bob Huges, Mike Ctotrell – 5th Edition-2011 - TMH

Reference Books:

1. Neil Whitten - Managing software development projects for success, John Wiley and sons
2. Roger S Pressman - Software engineering - McGraw Hill
3. Watts Humphrey - Managing Software Process, Addison Wesley

Web Reference

1. www.tutorialspoint.com/software.../software_project_management.htm:

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer ANY 10 out of 12 questions (each in 50 words)	1-12	2	20
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	8	40
C	Essay Answer any 2 out of 4 questions (each in 1200 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	2	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	3	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1	1	
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5		

ELECTIVE 2 – INTRODUCTION TO CLOUD COMPUTING

SUBJECT CODE : 16UISME02	THEORY	MARKS : 100
SEMESTER : VI	CREDITS : 5	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

- The aim is to introduce students the concept of cloud computing.
- To make students understand its importance and characteristics.
- To lay a strong foundation on cloud computing infrastructure on which our future will heavily rely upon.

UNIT I

Fundamentals of Cloud Computing – History – Definition – Importance of cloud computing in Business – Technology that led to cloud computing – Clustering, Grid computing and Virtualization

(20 Hours)

UNIT II

Fundamental Concepts – Roles – Cloud Provider, Cloud Consumer, Cloud Service Owner, Cloud Resource Administrator. Cloud Characteristics – On- demand usage, Ubiquitous Access, Multi-tenancy, Elasticity, Measured Usage.

(15 Hours)

UNIT III

Cloud Delivery Models – IaaS, PaaS, SaaS, Comparing cloud delivery models. Cloud deployment models - Public Cloud, Private Cloud, Hybrid Cloud and community cloud.

(15 Hours)

UNIT IV

Cloud Security – Terminology –Confidentiality, Integrity, Authenticity, Availability, Availability, Threat, Vulnerability, Risk. Threat Agents – Anonymous attacker, Malicious Service agent, Trusted attacker, malicious insider.

20 Hours)

UNIT V

Cloud security threats – traffic eavesdropping, malicious intermediary, DoS (Denial of Service), Insufficient Authorization, Virtualization Attack. Cloud Storage Device – Cloud Storage levels, Network storage interfaces, Object storage interface, database storage interfaces.

(20 Hours)

Prescribed Text:

1. Cloud Computing – Concepts, Technology and Architecture – by Thomas Erl – Prentice Hall.

Reference Books:

1. Cloud Computing – The best corner stone guide to cloud computing best practices.

2. Cloud Computing Made easy by Cary Landis and Dan Blacharski

Web Reference

1. www.tutorialspoint.com/software.../software_project_management.htm:

Question Paper Pattern:

Section	Question Component	Numbers	Marks	Total
A	Definition/Principle Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
B	Short Answer Answer any 5 out of 8 questions (each in 300 words)	13-20	6	30
C	Essay Answer any 2 out of 4 questions (each in 1600 words)	21-24	20	40
TOTAL MARKS				100

Distribution of Questions:

Section	Units	No. of Questions	
		Theory	Problems
Section A	Unit – 1	3	
	Unit – 2	3	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	2	
Section B	Unit – 1	2	
	Unit – 2	1	
	Unit – 3	2	
	Unit – 4	2	
	Unit – 5	1	
Section C	Unit – 1		
	Unit – 2	1	
	Unit – 3	1	
	Unit – 4	1	
	Unit - 5	1	

ELECTIVE 3–PROJECT WORK

SUBJECT CODE : 16UISME03	PROJECT	MARKS : 100
SEMESTER : VI	CREDITS : 5	No. OF HOURS PER WEEK : 6

COURSE OBJECTIVES:

To give a hands on practicum to the students in the fields of management, marketing, information systems, human resources, finance or software project management, thus enabling them to learn the nuances of working both as an individual and as a team.

The team size shall not be more than 3 students, incase if the students opt for software development project otherwise the students must pursue the project individually. The project work shall be submitted to the college 20 days before the end of the final year and the college has to certify the same and submit to the Examination.

The project shall be evaluated externally. The external examiner shall be from the panel of examiners suggested by the board of studies from time to time.

Those who fail in the project work will have to redo the project work and submit to the college for external examination.