GURU NANAK COLLEGE (AUTONOMOUS)

(Affiliated to University of Madras and Re-Accredited at 'A' Grade by NAAC) Guru Nanak Salai, Velachery, Chennai – 600042.



B. Com (Information Systems Management)

(SEMESTER PATTERN WITH CHOICE BASED CREDIT SYSTEM)

SYLLABUS

(For the candidates admitted in the Academic year 2022-23 and thereafter)

PREAMBLE

The curriculum of B.Com (ISM) is a three years under graduate programme for the student which paves way for a multi - dimensional career opportunity in the domains Commerce, Management and IT. It is structured in a way to develop appropriate problem solving, managerial and programming skills which are required for the industry. The goal of this programme is to infuse Accounting, Managing and Technical knowledge in young minds. The syllabus is designed in such a way that provides platform for the students to get clear knowledge in accounting concept, managerial concept and programming concept. The comprehensive curriculum design bestows excellent career opportunities and scope for higher studies.

LEARNING OUTCOME BASED CURRICULUM FRAMEWORK

From the Academic Year 2022-23 and thereafter

VISION

To evolve into the best department in the field of Commerce, Management and Information Technology which is renowned for providing the highest-quality of education, practical guidance and nurturing the young minds to serve the society with integrity.

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:

- **PO 1 :** After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, Finance Manager, HR Manager, and Project Manager and over all Administration abilities of a Company.
- **PO 2 :** Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- **PO 3**: Students can independently start up their own Business.
- **PO 4 :** Students can get thorough knowledge of finance, commerce and computer programming languages.
- **PO 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:

- **PSO 1 :** Examine the scenario and Formulate solution for the given problem using the knowledge and skills gained to be a successful Personnel.
- **PSO 2:** Employ knowledge and succeed in varied professional exams and pursue higher education in varied disciplines.

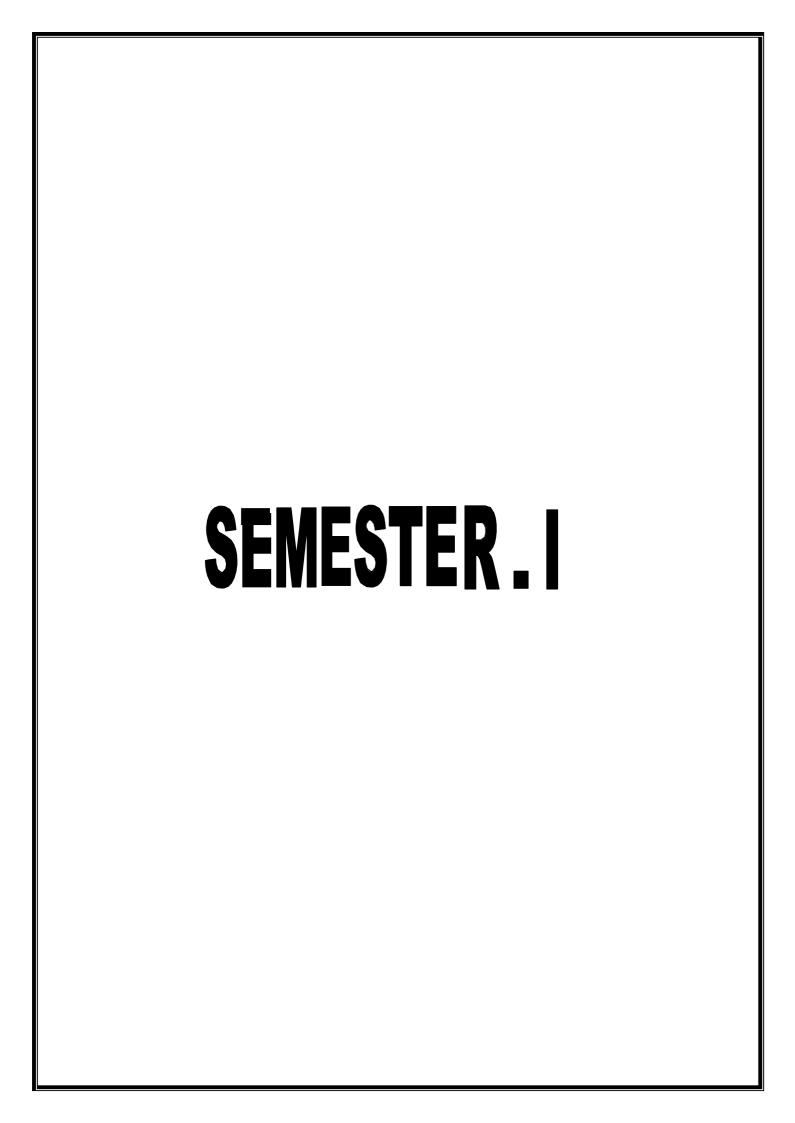
COURSE STRUCTURE B. Com (INFORMATION SYSTEMS MANAGEMENT)

2022-25 Batch onwards

Semester	Part	Course Component	Subject Name	Credits	Hours	Internal	External	Total
	Ι	Language	Tamil - I	3	6	50	50	100
	II	English	English - I	3	4	50	50	100
	III	Core Paper-I	Financial Accounting (Common to B.Com (GEN), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)		6	50	50	100
Semester	III	Core Paper-II	Principles of Management (Common to B.Com (GEN), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)	4	5	50	50	100
Š	III	Allied-I	Basic Computer Skills for Managers-Practical	5	5	50	50	100
	IV	Non Major Elective-I	Basics of Internet of Things	2	2	1	100	100
	IV	Soft Skills-I	Introduction to Study Skills	3	2	1	100	100
			Total Credits: 24 / Tot	al I	Iour	s pe	r wee	k: 30
	I	Language	Tamil - II	3	6	50	50	100
	II	English	English - II	3	4	50	50	100
	III	Core Paper-III	E-Business (Common to B.B.A, & B.Com (ISM))	4	6	50	50	100
Semester - II	III	Core Paper-IV	Marketing Management (Common to B.Com (GEN), B.Com (AF), B.Com (MM), B.Com (BM), B.Com (ISM), BBA)		5	50	50	100
nes	III	Allied-II	HTML Programming Practical	5	5	50	50	100
Ser	IV	Non Major Elective-II	Fundamentals of Disaster Management	2	2	ı	100	100
	IV	Soft Skills-II	Life Skills	3	2	-	100	100
			Total Credits: 24 / Tot	otal Hours per week: 3				k: 30
	III	Core Paper-V	Programming in C-Theory	4	6	50	50	100
III -	III	Core Paper-VI	Management Accounting (CommontoB.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)	4	6	50	50	100
Semester	III	Core Paper-VII	Business Communication (Common to B.Com (GEN), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)	4	5	50	50	100
	III	Core Paper-VIII	Programming in C- Practical	4	5	50	50	100
	III	Allied-III	Business Statistics - I (Common to B.Com (GEN), B.Com (CS), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)	5	6	50	50	100
	IV	Soft Skills-III	Job-Oriented Skills	3	2	-	100	100
	Total Credits: 24 / Total Hours per week: 30							

COURSE STRUCTURE B. Com (INFORMATION SYSTEMS MANAGEMENT) 2022-25 Batch onwards

Semester	Part	Course Component	Subject Name	Credits	Hours	Internal	External	Total
	III	Core Paper-IX	RDBMS with SQL-Theory	4	5	50	50	100
	III	Core Paper-X	Financial Management (Common to B.Com (GEN), B.Com (CS), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA))	4	5	50	50	100
·- IV	III	Core Paper-XI	Research Methods in Business (Common to B.Com (MM), B.Com(ISM)		5	50	50	100
ter	III	Core Paper-XII	RDBMS with SQL-Practical	4	5	50	50	100
Semester	III	Allied-IV	Business Statistics - II (Common to B.Com (Gen), B.Com (CS), B.Com (A& F), B.Com (BM), B.Com (MM), B.Com(ISM), BBA)	5	6	50	50	100
	IV	EVS	Environmental Studies	2	2	-	100	100
	IV Soft Skills-IV Quantitative Aptitude		3	2	-	100	100	
M	Total Credits: 26				Hou	ırs pe	r wee	k: 30
	III	Core Paper-XIII	Programming in Python-Theory (Common to B. Sc. (CS), B.C. A, B. Com (ISM))	4	6	50	50	100
Λ	III Core Paper-XIV B		Entrepreneurial Development (Common to B.Com General, CS, A&F, MM, BM, ISM & BBA)	4	6	50	50	100
	III	Core Paper-XV	Management Information System (Common to B.B.A & B.Com(ISM))	4	6	50	50	100
Semester	III	Core Paper-XVI	Python Programming Practical (Common to BCA, B.Sc (CS))	4	6	50	50	100
	III	Elective-I (Interdisciplinary Elective)	Adobe Photoshop	5	5	50	50	100
	IV	Value Education	Value Education	2	1	-	100	100
	V	Internship	Internship	2	-	-	-	-
			Total Credits: 25	/ Total	l Hou	ırs pe	r wee	k: 30
	III	Core Paper-XVII		4	6	50	50	100
	III	Core Paper-XVIII	PHP Programming-Theory	4	6	50	50	100
- VI	III	Core Paper-XIX	PHP Programming-Practical		6	50	50	100
Semester .	III	Elective-II	Human Resource Management (B.Com (GEN), B.Com (MM), B.Com (AF),B.Com (ISM), BBA)	5	6	50	50	100
S	III	Elective-III	Project	5	6	50	50	100
	V		Extension Activity	1	-	-	-	-
			Total Credits: 23	/ Total	Hou	ırs pe	r wee	k: 30
			Grand Total Credits: 146 /	Total 1	Hour	s per	week	: 180



CORE PAPER -I FINANCIAL ACCOUNTING

SUBJECT CODE:	THEORY & PROBLEM	MARKS: 100
SEMESTER: I	CREDITS: 4	TOTAL HOURS: 90

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK

Financial accounting frameworks provides an introduction to core accountingprinciples and their applications, both internal and external, to a business organization.

COURSE OUTCOMES:

On completion of the course the students will be able

- 1. To study the basic concepts and Accounting Standards.
- 2. To understand the procedures of Accounting under Single entrysystem.
- 3. To foster knowledge on Depreciation Accounting.
- 4. To get exposure to insurance claims and Bank reconciliation statement.
- 5. To acquire knowledge and applicability of Departmental accounts.

UNIT I (20 Hours)

Meaning and Scope of Accounting - Branches of Accounting - Objectives of Accounting - Brief outline on Indian Accounting Standards - Preparation of Final Accounts - Trading Account- Profit & Loss Account - Balance Sheet - Adjusting Entries - Closing Stock, Outstanding Expenses, Prepaid Expenses, Depreciation, Accrued Income, Income received in Advance, Bad Debts, Provision for Bad and doubtful debts, Interest on Capital and Interest on Drawings.

UNIT II (20 Hours)

Accounts from incomplete records (Single Entry System) – Meaning, Features, Defects, Differences between Single entry and Double entry system - Net worth method - Conversion method.

UNIT III (18 Hours)

Depreciation - Meaning - Causes - Difference among Depreciation, Amortization and Depletion - Concept of Depreciation - Different Methods of Depreciation-providing Depreciation as per Indian Accounting Standard - Straight Line Method and Written Down Value Method (Change in method excluded)

UNIT IV (17 Hours)

Bank Reconciliation Statement-Insurance claims, claim for loss of stock destroyed including Average Clause

apportioned – Preparation of Departmental profit and loss account.

UNIT V (15 Hours)

Departmental Accounting need, features, Basis of Apportionment of Expenses, treatment of Inter - Departmental Transfers at cost or Selling Price-Treatment of Expenses that cannot be

THEORY: 20% PROBLEMS: 80%

RECOMMENDED TEXTBOOKS

- 1. Gupta. R.L & Gupta. V.K, 2005, Financial Accounting, Sultan Chand & Sons, New Delhi, 6thedition.
- 2. Reddy T.S & Murthy.A, 2007, Financial Accounting, Margham Publications, Chennai, 5th edition.
- 3. Dr.S.Manikandan, Financial Accounting, Scitech Publications, Chennai.

REFERENCE BOOKS

- 1. Goel.D.K and Shelly Goel, 2018, Financial Accounting, Arya Publications, 2ndedition.
- 2. Jain. S.P & Narang .K, 1999, Financial Accounting, Kalyani Publishers, Ludhiana, 4th edition.
- 3. Rakesh Shankar. R & Manikandan.S, Financial Accounting, SCITECH, 3rdedition.
- 4. Shukla & Grewal, 2002, Advanced Accounting, Sultan Chand & Sons, New Delhi, 15th edition.
- 5. Tulsian P.C., 2006, Financial Accounting, Pearson Education.

E-LEARNING RESOURCES

- 1. https://www.accountingtools.com/articles/2017/5/15/basic-accounting-principles
- 2. https://en.wikipedia.org/wiki/Single-entry_bookkeeping_system
- 3. https://www.profitbooks.net/what-is-depreciation/
- 4. https://books.google.co.in/books?isbn=812690995
- 5. https://books.google.co.in/books?isbn=0470635290

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40
TOTAL MARKS				

Break up of questions for theory and problem

UNITS	SECT	TION A	SECT	ΓΙΟΝ B	SECT	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	1	1	1	-	1
II	1	1	-	1	-	1
III	1	1	-	1	-	1
IV	2	1	1	1	-	-
V	1	1	-	1	-	1
TOTAL	7	5	2	5	-	4
SECTION A - 12		SECTI	ON B - 7	SECTI	ON C - 4	

CORE PAPER –II PRINCIPLES OF MANAGEMENT

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

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK

This Principles of Management course is designed to help students understand the major functions of management (planning, organizing, leading, and controlling) and the significance of each function in relationship to the existence of the company.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To develop knowledge about evolution of management thoughts.
- 2. To better understanding of planning and decision making
- 3. To give an idea about organisation structure and different types of organisation
- 4. To make them familiarize with recruitment process and stages in selection
- 5. To provide idea about motivation, importance of communication and Principles of coordination.

UNIT I (20 Hours)

Management- Definition- Importance - Is Management art or science - Functions of Management- Role and Functions of a Manager- Levels of Management- Application of management in various functional areas - Production, Accounting and Finance, Marketing and Human Resource Management.

UNIT II (15 Hours)

Evolution of Management; Administrative Management: Henry Fayol, Scientific Management: F. W. Taylor, Modern Management–Peter Drucker

UNIT III (15 Hours)

Planning- Meaning- Objectives of planning- Importance of planning- Types of planning. Decision Making: Nature and Significance – Process of Decision Making – Types of Decision Making.

UNIT IV (15 Hours)

Organizing – Meaning and definition of Organizing, Importance of Organizing, and Principles of Organizing. Types of Organizational Structure- Line Organizational Structure, Staff Organizational Structure, Divisional Organizational Structure, Product/Project Organizational Structure, Matrix Organizational Structure and Hybrid Organizational Structure.

UNIT V (10 Hours)

Introduction to co-ordination - Need for co-ordination, Types of co-ordination and essential requisites for excellent co-ordination. Controlling: Meaning and Importance- Functions of controlling, Process of controlling and types of Control- Introduction to Management Information System (MIS)

RECOMMENDED TEXTBOOKS

- 1. C.B.Gupta, Management Theory & Practice Sultan Chand & Sons New Delhi, 16th Edition.
- 2. L.M.Prasad, Principles & Practice of Mangement Sulatan Chand & Sons New Delhi, 8th Edition.

REFERENCE BOOKS

- 1. P.C.Tripathi & P.N.Reddy, Principles of Managements Tata Mc.Graw Hill New Delhi, 5th Edition
- 2. N.Premavathy, Principles of Mangement Sri Vishnu Publication Chennai 8th Edition
- 3. J.Jayashankar, Business Management Margham Publications Chennai

E-LEARNING RESOURCES

- 1. Functions of Management Planning, Organizing, Staffing, Directing and Controlling (managementstudyguide.com)
- 2. https://www.tutorialspoint.com/management_principles/management_principles_organizational_structure.htm
- 3. Introduction to Business Management Online Course FutureLearn

GUIDELINES TO THE QUESTION PAPER SETTERS Question Paper Pattern

Section	Section Question Component		Marks	Total
A Answer any 10 out of 12 questions (Each in 50 words)		1 -12	3	30
В	Answer any 5 out of 7 questions (Each in 300 words)	13-19	6	30
С	Answer any 4 out of 6 questions (Each in 1200 words)	20-25	10	40
	TOTAL MARKS			100

Break up of questions for theory

UNITS	SECTION A		SECTION B		SECTION C	
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	-	2	-	1	-
II	2	-	1	-	1	-
III	3	-	1	-	2	-
IV	2	-	2	-	1	-
V	3	-	1	-	1	-
TOTAL	12		7	1	6	-
S	SECTION A	- 12	SECTI	ON B - 7	SECTI	ON C - 6

ALLIED PAPER – I BASIC COMPUTER SKILLS FOR MANAGERS

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

COURSE FRAMEWORK

This basic computer skills course will provide you with an understanding of the most popular, current technologies used at home and in the workplace.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To make the students understand and demonstrate the concept of Microsoft word. Describe the features and functions of the categories of application.
- 2. To make the students aware about the basic features of PowerPoint.
- 3. To make students develop efficiency with specific sets of skills in Microsoft excel.
- 4. To help the students examine database concepts and explore the Microsoft Office Access environment.
- 5. To make student build a new database with related tables.

UNIT I (15 Hours)

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

UNIT II (15 Hours)

Power point Presentation: Creation of Slide, working with Design Templates, Working with Images, Creation of Slide Master, Creation of Custom themes, Use of Action Buttons and Hyperlinks, embedding videos in slides, Custom Animation, Use of Timer.

UNIT III (15 Hours)

Excel: Cell Editing -Usage of Formulae and Built-in Functions -File Manipulations -Data Sorting (both number and alphabets)-Data Filters — Charts and Graphs -Usage of Auto Formatting-pivot tables-macros-hyperlinks

UNIT IV (15 Hours)

Microsoft Access: Creation and working with Database-Creation and linking of tables customizing fields-customizing tables- creating forms using wizard-creating queries using Wizard

UNIT V (15 Hours)

Microsoft Access: Creation of reports using report wizard-summary report-design view modify existing report - beautifying forms and reports.

RECOMMENDED TEXTBOOKS

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

NON MAJOR ELECTIVE – I BASICS OF INTERNET OF THINGS

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

COURSE FRAMEWORK:

Students will gain practical experience in the development of Cloud-based IoT systems and exposure to appropriate hardware and software platforms that underpin such development.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. Explain the definition and usage of the term "Internet of Things" in different contexts
- 2. Understand the key components that make up an IoT system
- 3. Differentiate between the levels of the IoT stack and be familiar with the key technologies and protocols employed at each layer of the stack
- 4. Apply the knowledge and skills acquired during the course to build and test a complete, working IoT system involving prototyping, programming and data analysis
- 5. Understand where the IoT concept fits within the broader ICT industry and possible future trends

UNIT I (6 Hours)

IOT - What is the IoT and why is it important? - Elements of an IoT Ecosystem-Technology Drivers-Business Drivers- Trends and Implications-Overview of Governance-Privacy and Security Issues

UNIT II (6 Hours)

IOT PROTOCOLS - Protocol Standardization for IoT – Efforts – M2M and WSN Protocols – SCADA and RFID Protocols – Issues with IoT Standardization – Unified Data Standards – Protocols – IEEE802.15.4.

UNIT III (6 Hours)

IOT ARCHITECTURE - IoT Open source architecture (OIC)- OIC Architecture & Design principles- IoT Devices and deployment models- IoTivity : An Open source IoT stack - Overview-IoTivity stack architecture.

UNIT IV (6 Hours)

IOT APPLICATIONS - IoT applications for industry: Future Factory Concepts, Brownfield IoT, Smart Objects, Smart Applications. Studyof existing IoT platforms /middleware, IoT- A, Hydra etc.

UNIT V (6 Hours)

WEB OF THINGS - Web of Things versus Internet of Things – Two Pillars of the Web – Architecture Standardization for WoT– Platform Middleware for WoT – Unified Multitier WoT Architecture.

Text Book:

- 1. Honbo Zhou, "The Internet of Things in the Cloud: A Middleware Perspective", CRC Press, 2012.
- **2.** Dieter Uckelmann, Mark Harrison, Michahelles, Florian (Eds), "Architecting the Internet of Things", Springer, 2011.

Reference Book:

1. Vijay Madisetti and ArshdeepBahga, "Internet of Things (A Hands-on-Approach)",1st Edition, VPT, 2014

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 5 out of 10 questions (each in 100 words)	1-10	20	100

Break up of questions for theory and problem

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

SOFT SKILLS – I PAPER TITLE: INTRODUCTION TO STUDY SKILLS

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: I	CREDITS: 3	NO. OF HOURS: 30

COURSE FRAMEWORK:

- To help, develop and improve the vocabulary of the learners
- To help the learners develop the skill of inference
- To help the learners to acquire writing skills in English

Use of Dictionary and Dictation

Speech Sounds in English & Right Pronunciation Stress & Intonation Vocabulary Building Exercises Listening and Reading Comprehension Paragraph and Essay Writing

REFERENCE BOOKS:

- 1. Hewings, Martin. 1999. Advanced English Grammar: A Self- study Referenceand Practice Book for South Asian Students. Reprint 2003. Cambridge University Press. New Delhi.
- 2. Lewis Norman.1991. Word Power Made Easy.
- 3. Mohan, Krishna & Meenakshi Raman. 2000. Effective English Communication. Tata Mc Graw Hill Publishing Company Ltd.
- 4. Mohan, Krishna & Meera Banerji. 2001. Developing Communication Skills. Macmillan. Syamala. 2002. Effective English Communication for You. Emerald Publishers, Chennai.
- 5. Harishankar, Bharathi. Ed. Essentials of Language and Communication. University of Madras.
- 6. Swan, Michael and Catherine Walter. 1990. The Cambridge English Course-2. Cambridge University Press.

SEMESTER. II

CORE PAPER –III E- BUSINESS

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: II	CREDITS: 4	TOTAL HOURS: 90

(Common to B.B.A, ISM)

COURSE FRAMEWORK

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

COURSE OUTCOME

On completion of the course the students will be able.

- 1. To demonstrate an understanding of the foundations and importance of E-business.
- 2. To prepare the students understand about the key features of Internet, Intranets and Extranets and explain how they relate to each other.
- 3. To make the students aware about the electronic payment systems.
- 4. To obtain the knowledge of e-retailing and its services.
- 5. To understand the basic concept of M-commerce and generation of mobile wireless technology.

UNIT I (20 Hours)

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).

UNIT II (20 Hours)

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.

UNIT III (15 Hours)

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

UNIT IV (20 Hours)

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.

UNIT V (15 Hours)

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.

RECOMMENDED TEXTBOOKS

- 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. Kosivr, 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

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Number s	Marks	Total
A	Definition/Principle Answer any10 out of 12 questions (each in 50 words)	1-12	3	30
В	Short Answer Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Essay Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40

Break up of questions for theory

UNITS	SECT	ΓΙΟΝ A	SEC	ΓΙΟΝ B	SEC	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	3	-	2	-	2	-
III	2	-	1	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
	SECTION A	A-12	SECT	ION B-7	SECT	ION C-6

CORE PAPER – IV MARKETING MANAGEMENT

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

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK

This course is designed to explain the relevance of strategic marketing frameworks used tocreate value for the business and customers.

COURSE OUTCOME:

On completion of the course the students will be able.

- 1. To Identify the basic concepts and various environmental factors affecting marketing functions.
- 2. To enable the students to analyze the buyer behavior and market Segmentation.
- 3. To Compare and analyze the classification of goods and apply the tools of branding, packaging, pricingand labeling.
- 4. To demonstrate the knowledge of advertising, public relations and sales promotion.
- 5. To critically analyze the recent changes in the field of marketing and discuss the types physical distribution.

UNIT I (14 Hours)

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.

UNIT II (14 Hours)

Consumer – Customer – Buying Process – Introduction to Buyer Behavior – Factors influencing buyer Behavior, Market segmentation – Need and basis of Segmentation – Targeting – Positioning

- CRM and Customer Satisfaction.

UNIT III (17 Hours)

The Product – Goods - Services – Ideas - Characteristics – benefits – Classifications – Consumer goods – Industrial goods – Difference between Consumer goods and Industrial Goods New Product Development process – Product life Cycle – Introduction, Growth, Maturity, Decline. Branding – Packaging & Labeling – Pricing – Meaning, Objectives and Types of Pricing.

UNIT IV (16 Hours)

Physical Distribution: Importance – Channels of Distribution of consumer goods, Distribution of industrial goods and Distribution of Agricultural goods – Levels of channels: Zero level, one level, two levels and three level channel- Distribution issues-online Marketing-Green Marketing.

UNIT V (14 Hours)

Promotion – Meaning, Objective, Types – A brief overview of Advertising – Different types of Advertising – Publicity – Public Relations – personal selling – Direct selling and Sales promotion – Dealer Promotion – Customer Promotion

RECOMMENDED TEXTBOOKS

- 1. Kotler, P. (2007). Marketing Management—The Millennium Edition Prentice Hall of India PrivateLimited. *New Delhi*, 35-8.
- 2. Pillai & Bagavathi, R. S. N. (1999). Marketing Management. S. chand& Co. Ltd.

REFERENCE BOOKS

- 1. Joshi, G. (2009). Information Technology for retail. Oxford University Press, Inc..
- 2. Mullins, J., Walker, O. C., & Boyd Jr, H. W. (2012). Marketing management: A strategic Decision- making approach. McGraw-Hill Higher Education.
- 3. Pradhan, S. (2011). Retailing management: Text and cases. Tata McGraw-Hill Education. 4. Ramaswamy,
- 4. V. S., & Namakumari, S. (2009). Marketing management: Global perspective, Indian context. Macmillan. 5.Withey, F. (2006). Marketing Fundamentals. The Official CIM Coursebook 06/07. Taylor & Francis.

E-LEARNING RESOURCES

- 1. https://iedunote.com/marketing-definition-functions-importance-process
- 2. http://www.yourarticlelibrary.com/marketing/top-10-advantages-of-marketing/53152
- 3. http://www.notesdesk.com/notes/marketing/the-marketing-mix-4-ps-of-marketing/
- 4. https://www.enotesmba.com/2013/03/marketing-notes-marketing-mix.html
- 5. https://www.marketingtutor.net/consumer-decision-making-process-stages/
- 6. https://courses.lumenlearning.com/boundless-marketing/chapter/ethics-in-marketing/
- 7. https://www.youtube.com/watch?v=Mco8vBAwOmA

GUIDELINES TO THE QUESTION PAPER SETTERS Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40	
	TOTAL MARKS				

Break up of questions for theory

UNITS	SECT	SECTION A		SECTION B		ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	2	-	1	-	1	-
III	2	-	2	-	2	-
IV	2	-	1	-	1	-
V	3	-	1	-	1	-
TOTAL	12	-	7	-	6	-
	SECTION	A - 12	SECTION B - 7		SECTI	ON C - 6

ALLIED PAPER –II HTML PROGRAMMING

SUBJECT CODE:	PRACTICAL	MARKS: 100
SEMESTER: II	CREDITS: 5	TOTAL HOURS: 75

COURSE FRAMEWORK

Understand the principles of creating an effective web page, including an in-depth consideration of information architecture.

COURSE OUTCOME:

On completion of the course the students will be able.

- 1. To familiarize students with the tags and works on with basic html programs.
- 2. To make students work with adding graphics to html and also different attributes.
- 3. To make students understand the concept of linking of documents using hyperlink and also external document reference.
- 4. To introduce the concept of dynamic HTML
- 5. To make students create a form using html tags.

UNIT-I (15 Hours)

Introduction to HTML-HTML Tags-Paired Tags-Singular Tags-The structure of an HTML Program-Titles and Footers-Text Formatting–Emphasizing Material in a web Page-Text Styles Other Text Effects-Lists-Types of Lists-Unordered Lists- Ordered Lists-Definition Lists.

UNIT-II (15 Hours)

Adding Graphics to HTML-Using the Border Attribute, Width and Height Attribute-Align Attribute-The ALT Attribute-Tables-The Caption Tags-Using the width Attribute-Cell PaddingCell Spacing Attribute-Using the Background Color Property-Using the Row span and Colspan Attributes.

UNIT-III (15 Hours)

Linking Documents-Links-External Document References-Internal document references Hyper Linking to a HTML File-Linking to a particular location in a separate Document-Images as Hyperlinks-Image Maps-Frames-The Frameset Tags-The Frame Tags-Targeting Named frames.

UNIT-IV (15 Hours)

Concept of CSS-Creating Style Sheet-CSS Properties-CSS Styling (Background, Text Format, Controlling Fonts)-Working with block elements and Objects-Working with Lists and Tables-CSS Id and Class-Box Model (Introduction, Border properties, Padding Properties, Margin properties).

UNIT-V (15 Hours)

CSS Advanced (Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute sector)-CSS Color-Creating Page Layout and Site Designs.

RECOMMENDED TEXTBOOKS

- 1. Mastering HTML, CSS & JavaScript Web Publishing; <u>Laura Lemay</u> (Author), <u>RafeColburn</u> (Author), <u>Jennifer Kyrnin</u> (Author) BPBPublications- July 2016
- 2. HTML &CSS: The Complete Reference: Fifth Edition; Thomas Powell; Mar 2010

REFERENCE BOOKS:

- HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP andjQuery; by DT Editorial Services; DreamTech Press; Second Edition; April 2016
- 2. HTML 5 in Simple Steps Paperback 5 Oct 2010 by Kogent Learning Solutions Inc.(Author)
- 3. Beginning CSS: Cascading Style Sheets for Web Design Wiley Ind, Ian Pouncey, Richard York.

WEB REFERENCE:

- 1. http://www.w3schools.com
- 2. https://www.tutorialpoint.com

NON-MAJOR ELECTIVE –II FUNDAMENTALS OF DISASTER MANAGEMENT

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

COURSE FRAMEWORK:

The aim of the programme is to, through knowledge, experience that will reduce disaster risks and contribute to better and more targeted public health-based relief following disasters.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To increase the knowledge and understanding of the disaster phenomenon, its different contextual aspects, impacts and public health consequences.
- 2. To increase the knowledge and understanding of the International Strategy for Disaster Reduction (UN-ISDR) and to increase skills and abilities for implementing the Disaster Risk Reduction (DRR) Strategy.
- 3. To ensure skills and abilities to analyse potential effects of disasters.
- 4. To ensure skills and ability to design, implement and evaluate research on disasters.
- 5. To ensure the strategies and methods to deliver public health response to avert these effects.

UNIT I (6 Hours)

Meaning-Definition-Basic Aspects-Types of Disasters.

UNIT II (6 Hours)

Stages IN Disaster - Pre, During and Post Disaster.

UNIT III (6 Hours)

Disaster Mitigation –Guiding Principles of Mitigation-Formulation and implementation of Mitigation programmes-Business Continuity Plan.

UNIT IV (6 Hours)

Disaster Training – Utilisation of Resources-Training and Public Awareness.

UNIT V (6 Hours)

Disaster Management Policy and Legislation-Disaster Management – Strategy in India.

REFERENCE BOOKS:

- 1. "Disaster Management", I sundar, T. Sezhiyan 1st Edition, Sarup and Sons, New Delhi, 2007.
- 2. "Disaster Management", A Disaster Manager's Hand boob; Carter.W, ASTAN Development Bank, Manila.
- 3. Natural Disaster Management, Destruction, Safety and Pre cautions, S. Prasad, Mangalam publishers and Distributors, New Delhi 2007.
- 4. Challenge and Response; K.D.Gangrade, S.Dhadde, Delhi, Rachna publications, 1973

WEB REFERENCE:

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

GUIDELINES TO THE QUESTION PAPER SETTERS

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
	100			

Break up of questions for theory

Units	No. of Questions		
Units	Theory	Problems	
I	2	-	
II	2	-	
III	2	-	
IV	2	-	
V	2	-	
TOTAL	10	-	
	SECTION A 10		

SOFT SKILLS – II PAPER TITLE: LIFE SKILLS

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: II	CREDITS: 3	NO. OF HOURS: 30

COURSE FRAMEWORK:

- To build the confidence of learners to face the challenges of a globalized society
- To sensitize learners' ethical, moral and social values in their work environment
- To help them understand how to overcome stress-related problems
- To train the learners to use their time effectively

SWOC Analysis

Etiquette

Stress ManagementTime

Management

Discussion of Success Stories

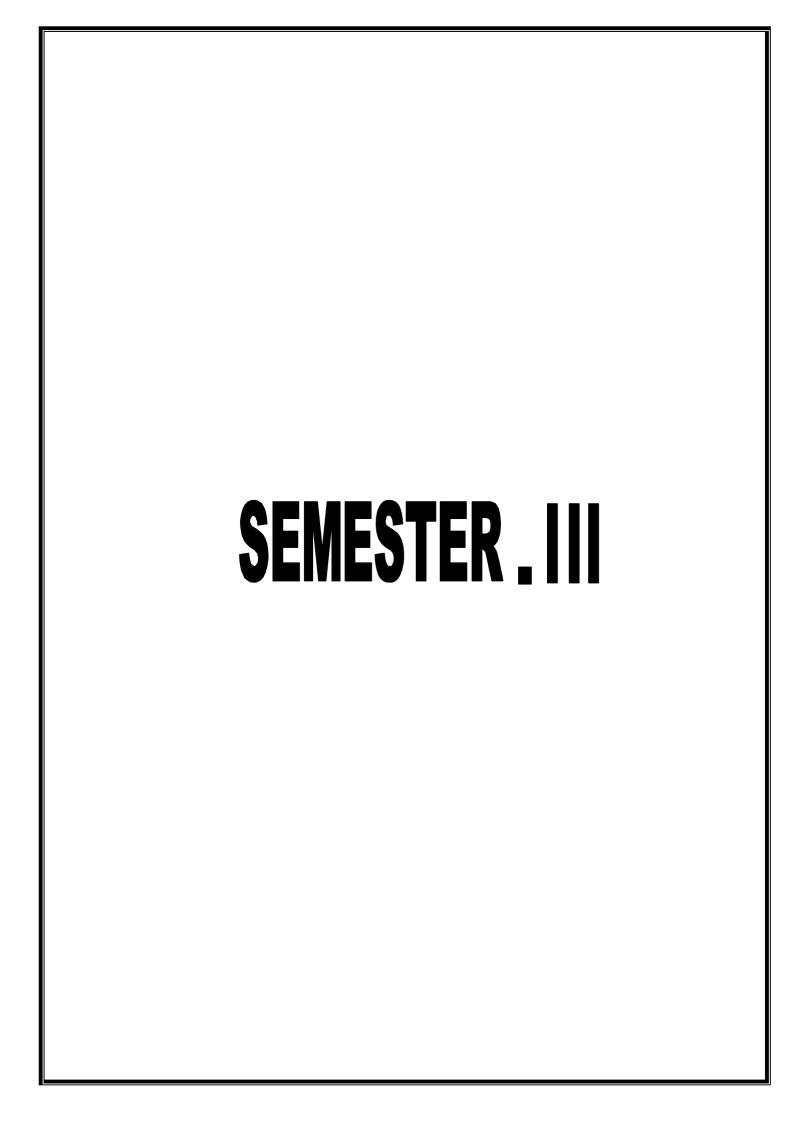
- i. Auto-suggestions
- ii. Problem solving
- iii. Decision Making
- iv. Presentation Skills-Oral/PPT

REFERENCE BOOKS:

- 1. Pease, Allen. 1998. Body Language: How to read other's thoughts by their gestures. Sudha Publications. New Delhi.
- 2. Powell. In Company. MacMillan

WEBLINKS:

1.http://www.essentiallifeskills.net//



CORE PAPER - V PROGRAMMING IN 'C'

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: III	CREDITS: 4	TOTAL HOURS: 90

COURSE FRAMEWORK:

The aim of the programme is to, through knowledge, experience that will reduce disaster risks and contribute to better and more targeted public health-based relief following disasters.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. Identify situations where computational methods and computers would be useful.
- 2. Choose the right data representation formats based on the requirements of the problem.
- 3. Use the comparisons and limitations of the various programming constructs and choose the right one for the task in hand.
- 4. Demonstrate the call by value and call by reference in functions.
- 5. Ability to work with arrays of complex objects.

UNIT I (15 Hours)

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.

UNIT II (20 Hours)

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.

UNIT III (20 Hours)

Input/output functions-Printf function- Scanf function - Simple C programs - Functions - Defining, Declaration, Accessing functions - Function prototypes - Passing arguments to functions - Call by Value- Call by reference - Recursion.

UNIT IV (20 Hours)

Arrays - Definition and Declaration - Passing arrays to function – Array Types - One-dimensional arrays - Two-dimensional arrays - Multidimensional arrays – Arrays.

UNIT V (15 Hours)

String functions - Storage classes: Private-Public- Automatic- Extern- Static storage classes.

RECOMMENDED TEXTBOOKS

- 1. Programming in C by E.Balaguruswamy; Tata Mc Graw Hill Publication; 2008
- 2. Programming in C by V. Raja Raman; 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

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40	
	TOTAL MARKS				

Break up of questions for theory

UNITS	SECT	ΓΙΟΝ A	SECTION B		SECT	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	3	-	2	-	2	-
III	2	-	1	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
SECTION A-12		SECT	ION B-7	SECT	ION C-6	

CORE PAPER - VI MANAGEMENT ACCOUNTING

SUBJECT CODE:	THEORY & PROBLEM	MARKS: 100
SEMESTER: III	CREDITS: 4	TOTAL HOURS: 90

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK

This Framework identifies six domains of core knowledge, skills, and abilities that finance and accounting professionals need to remain relevant in the Digital Age and perform their current and future roles effectively.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To enable the students to acquire sound knowledge of concepts, methods and techniques of management accounting.
- 2. To apply the analytical skills associated with the interpretation of accounting reports.
- 3. To evaluate the results of profitability, liquidity, solvency and efficiency levels in the business.
- 4. To communicate the knowledge about fund flow and cash flow statements under (AS-3) and also the concept of budgetary control.
- 5. To evaluate the classification of budgets.

UNIT I (15 Hours)

Management Accounting: Meaning- nature, scope and functions of management accounting- role of management accounting in decision making; management accounting vs. financial accounting-tools and techniques of management accounting. Financial statements- meaning and types of financial statements - objectives and methods of financial statements analysis comparative, common size statements and Trend analysis.

UNIT II (20 Hours)

Ratio Analysis – Interpretation, benefits and limitations - Classification of ratios – Liquidity, Profitability and turnover ratios.

UNIT III (20 Hours)

Funds flow statement - objectives - uses and limitations - preparation of funds flow statement - schedule of changes in working capital – non fund items - adjusted profit and loss account.

UNIT IV (20 Hours)

Cash flow statement – significance preparation of cash flow statement as per IND AS3- Cash from Operating, Investing and Financing activities.

UNIT V (15 Hours)

Budgets and Budgetary Control- Meaning-Objectives-Advantages-Limitations-Installations of Budgetary Control System-Classifications of Budgets based on Time, Functions and Flexibility. Preparation of Budgets (Sales, Production, Flexible, Cash, Master Budget and Raw Material Purchase Budget)

THEORY: 20% PROBLEMS: 80%

RECOMMENDED TEXTBOOKS

- 1. Maheswari, D. S, "Principles of Management Accounting" Sultan Chand & Sons. Delhi-53, 17th Edition
- 2. Reddy, T. S., & Y. Hariprasad Reddy, Management Accounting. Margham Publication, 15th Edition.

REFERENCE BOOKS

- 1. Gupta, S. K., & Sharma, R. K., Management Accounting: Principles and Practice.
- 2. Hingorani, R. (2005). Grewal. Management Accounting.
- 3. Khan, M. Y., & Jain, P. K. (2017). Management Accounting and Financial Analysis.
- 4. Murthy, A. & Gurusamy, S. Management Accounting Theory and Practice, Vijay Nicole
- 5. Srinivasan, N. P., & Murugan, M. S,. Accounting for management. S. Chand.

E-LEARNING RESOURCES

- 1. https://www.wallstreetmojo.com/ratio-analysis/
- 2. https://books.google.co.in/books?isbn=0070620237
- 3. https://books.google.co.in/books?isbn=1853963836
- 4. https://books.google.co.in/books?isbn=8131731782

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40
TOTAL MARKS				

Break up of questions for theory and problem

UNITS	SECT	ΓΙΟΝ A	SECTION B		SEC	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	1	1	1	-	-
II	1	2	-	1	-	1
III	1	1	-	1	-	1
IV	1	1	-	1	-	1
V	1	1	1	1	-	1
TOTAL	6	6	2	5	-	4
SECTION A - 12		SECTION B - 7		SECTION C - 4		

CORE PAPER - VII BUSINESS COMMUNICATION

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

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK:

It is goal oriented. The rules, regulations and policies of a company have to be communicated to people within and outside the organization.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To make the students aware about the business communication.
- 2. To understand the channels of communication and understand the structure and layout of business letters.
- 3. To extend business communication skills through the application and exercises for personal correspondences.
- 4. To extend business communication skills through the application and exercises for business correspondences.
- 5. To develop awareness regarding new trends in business communication, various media of communication and communication devices.

UNIT I (15 Hours)

Meaning and Definition of Business Communication – Process – need – Methods: oral or verbal, non-verbal written Communication – Audio – Video Communication - channels of communication: formal, in-formal Dimensions of communication: upward, downward, horizontal, diagonal – Principles of Effective Communication – Barriers to Communication.

UNIT II (15 Hours)

Understanding the purpose of writing a Business Letter – 4 C's of Good Communication: correctness – Clarity Conciseness – Courtesy – Characteristics of a Good Business Letter - Stages of writing Business Letters – Lay out - Kinds of Business Letters.

UNIT III (15 Hours)

Persuasive Letters – Enquiries – Replies – Orders – Sales Letters – Circulars – Complaints- Bank Correspondence – Insurance Correspondence – Correspondence with shareholders, Directors.

UNIT IV (15 Hours)

Patterns of Business Presentation – Chronological – Categorical – Cause and Effect – Problem Solution – Elements of presentation- Rules of making effective PowerPoint presentations- Effective Sales Presentation.

UNIT V (15 Hours)

Importance of Report Writing - Kinds of reports- Business Meetings -Agenda - Minutes of the Meeting - Modern forms of Communication. - Social Media - Email Etiquettes - Video Conferencing

RECOMMENDED TEXTBOOKS

- 1. Rajendra Pal and Korlahalli, Essentials of Business Communication-Sultan Chand &Sons, NewDelhi.
- 2. N.S.Raghunathan, R.Santhanam, Business Communication-Margham Publications

REFERENCE BOOKS

- 1. Rajendra Pal and Korlahalli, Essentials of Business Communication-Sultan Chand&Sons, New Delhi.
- 2. Shirley Taylor, Communication of Business- Pearson Publication- New Delhi
- 3. 3.K.Sundar, A.Kumararaj, Business Communication, Vijay Nichole Imprints Pvt.Ltd.

E-LEARNING RESOURCES

- 1. https://books.google.co.in/books?isbn=130556023X
- 2.https://books.google.co.in/books?isbn=0618990488
- 3. https://books.google.co.in/books?isbn=0538466251

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40	
	TOTAL MARKS				

Break up of questions for theory and Letter writing

UNITS	SECT	ΓΙΟΝ A	SECTION B		SECT	ΓΙΟΝ C
		LETTER		LETTER		LETTER
	THEORY	WRITING	THEORY	WRITING	THEORY	WRITING
I	2	-	1	-	2	-
II	2	-	1	1	-	1
III	3	-	1	2	-	1
IV	3	-	-	-	-	1
V	2	-	1	-	1	-
TOTAL	12	-	4	3	3	3
	SECTION A	A-12	SECTION B-7		SECTION C-6	

CORE PAPER - VIII

PROGRAMMING IN 'C' PRACTICAL

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

COURSE FRAMEWORK

This course is used in various tasks, such as developing system applications, desktop applications, operating system as well as IoT applications.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To employ good software engineering practices such as incremental development, data integrity checking and adherence to style guidelines.
- 2. Design flow-chart, algorithm and program logic.
- 3. Apply programming concepts to compile and debug c programs to find solutions.
- 4. Demonstrate the concept of data types, loops, functions, array, pointers, string, structures and files.
- 5. To analyze the usage of data using primitive and structured types.

EXERCISES

- 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. Linear Search
- 14. Array addition/Subtraction
- 15. Swapping of variables

ALLIED PAPER –III BUSINESS STATISTICS – I

SUBJECT CODE:	THEORY& PROBLEM	MARKS: 100
SEMESTER: III	CREDITS: 5	TOTAL HOURS: 90

(Common to B.Com (GEN), B.Com (CS), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)

COURSE FRAMEWORK

To Introduce basic concepts of Statistics and computing statistical aspects

COURSE OUTCOME

- 1. Discuss quantitative and qualitative data, primary and secondary data, collection of data, census method and sampling method
- 2. Create the Diagrammatic and graphical representation of data using Simple bar diagram, Multiple bar diagram, sub-divided bar diagram, Deviation bar diagram, Histogram and Pie diagram.
- 3. Evaluate the Measures of Central tendency Mean, median and mode for the given data
- 4. Find the measure of Dispersion Range, Quartile Deviation, Mean Deviation, Standard Deviation
- 5. Compute measures of Skewness for various types of data.

UNIT I (18 Hours)

Origin Meaning, Definition and Characteristics of Statistics – Uses and Limitations - Sources of Statistical data – Primary and Secondary – Collection of Primary Data – Direct Personal, Indirect Oral, Mailed Questionnaire and Schedule Methods – Editing of Secondary Data-Scatter diagram.

UNIT II (18 Hours)

Measures of Central Tendency/ Averages – Arithmetic Mean, Median, Quartiles, Deciles and Percentiles, Mode, Geometric Mean, Harmonic Mean, Combined Meanandweighted mean

UNIT III (18 Hours)

Measures of Dispersion – Range, Quartile Deviation, Mean Deviation and Standard Deviation – Coefficient of Variation.

UNIT IV (18 Hours)

Measures of Skewness – Meaning, Definition and Types – Karl Pearson's coefficient of Skewness and Bowley's Coefficient of Skewness.

UNIT V (1 Hours)

 $\label{lem:condition} Probability-Addition\ and\ Multiplication\ Theorem-Conditional\ probability-Bayer's\ Theorem\ (without\ proof)-Simple\ problems.$

THEORY: 20% PROBLEMS: 80%

RECOMMENDED TEXTBOOKS

- 1.S.P.Gupta, Statistical Methods, Sultan Chand & Sons, 2011
- 2.P.R. Vital ,Business Statistics, Margham Publications.

REFERENCE BOOKS

- 1. E.L.Lehmann, Elements of Statistical Hypothesis, John Wiley & Sons.
- 2. R.S.N.Pillai & B.Bhagavathi, Practical Statistics, S.Chand& Company.

E-LEARNING RESOURCES

- 1. https://books.google.co.in/books?isbn=0764142399
- 2. https://books.google.co.in/books?isbn=8122400116
- 3. https://books.google.co.in/books?isbn=8131726029

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
C	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40
TOTAL MARKS				

Break up of questions for theory and problem

UNITS	SECTION A		SECTION B		SECTION C	
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	-	2	-	-	-
II	2	-	-	1	-	1
III	1	3	-	2	-	1
IV	1	1	-	1	-	1
V	1	1	-	1	-	1
TOTAL	7	5	2	5	-	4
SECTION A - 12			SECTION B - 7		SECTION C - 4	

SOFT SKILLS – III PAPER TITLE: JOB-ORIENTED SKILLS

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: III	CREDITS: 3	NO. OF HOURS: 30

COURSE FRAMEWORK:

- To prepare the students to be job-ready.
- To help learners use English Language appropriately to the role or situation.
- To develop confidence in them to face Interviews.
- To train them to prepare their own CV/Resume

Different kinds of Interviews

Letter of Application and CV

Technical Writing - Circulars, Memos, Agenda and Minutes

Group Discussion

Review

- i. Books
- ii. Films

REFERENCE BOOKS:

- 1. Harishankar, Bharathi. ed. Essentials of Spoken and Presentation Skills. University of Madras.
- 2. John, Seely. 1998. The Oxford Guide to writing and speaking. Oxford U P, 1998, Delhi.
- 3. The Princeton Language Institute and Lanny Laskowski.2001. 10 days to more confident Public Speaking. Warner Books.
- 4. http://jobsearch.about.com/cs/curriculumvitae.html.//
- 5. http://www.cvtips.com//

OUESTION PAPER PATTERN UG - SOFT SKILLS

TIME – 3 HRS

MAXIMUM MARKS – 50

 $\underline{PART - A} (5X2=10)$

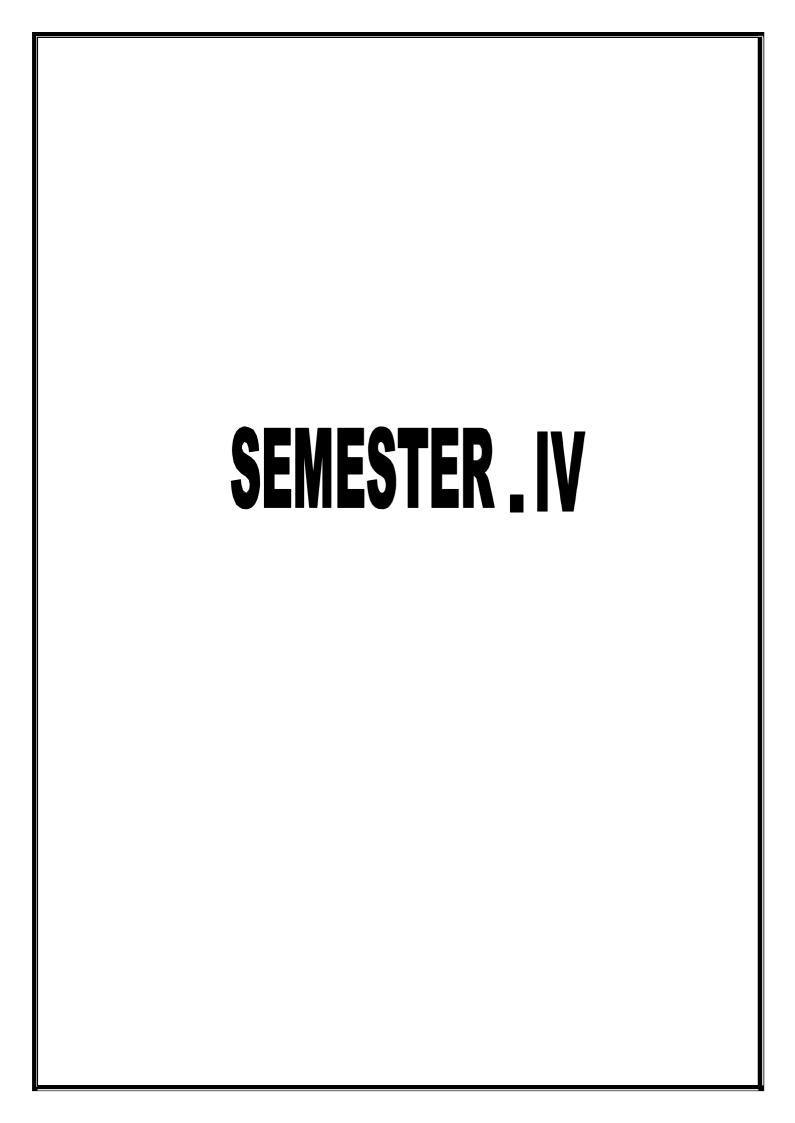
Answer any FIVE from the questions given below from Q.No.1 to Q.No.7 (5 out of 7)

 $\underline{PART} - \underline{B} (4X5 = 20)$

Answer any FOUR from the questions given below from Q.No.8 to Q.No.13 (4 out of 6)

 $\underline{PART} - \underline{C}(2X10=20)$

Answer TWO questions only choosing one each from Q.No.14 &Q.No.15 (Internal Choice)



CORE PAPER - IX RDBMS with SQL

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: IV	CREDITS: 4	TOTAL HOURS:75

COURSE FRAMEWORK

It uses a structure that allows us to identify and access data in relation to another piece of data in the database.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To identify the basic concepts and various data model used in database design.
- 2. To apply relational database theory and be able to describe relational algebra expression, tuple and domain relation expression from queries.
- 3. To recognize and identify the use of normalization and functional dependency, indexing and hashing technique used in database design.
- 4. To demonstrate the purpose of query processing and optimization and also demonstrate the basic of query evaluation.
- 5. To apply and relate the concept of transaction, concurrency control and recovery in database.

UNIT-I (15 Hours)

Database and Database Management Systems: Introduction-Meaning and Definition of Database Management System-Components of Database Management System-Database Engine-Data Dictionary-Query Processor-Report Writer-Forms Generator-Application Generator - Advantages of database Management Systems. History of Database Management System-Hierarchical Databases-Network Databases-relational Databases-Object Oriented Databases.

UNIT-II (15 Hours)

Designing Databases-Identifying User Requirements-Business Objects-Tables and Relationships-Definitions -Primary key. Class Diagrams-Classes and Entities-Association and Relationships. Data Types-Text-Numbers-Dates and Times-Binary Objects-Computed Values-User- Defined Types. Events.

UNIT-III (15 Hours)

Data Queries-Query Basics-Single Table-Introduction to SQL-Sorting the Output-Distinct-Useful WHERE clauses. Computations- Basic Arithmetic Operators-Aggregation- Functions. Subtotals and GROUP BY-Conditions on Totals (HAVING)-WHERE versus HAVING. Multiple Tables-Joining Tables- Identifying Columns in Different Tables-Joining Many Tables-Create View.

UNIT-IV (15 Hours)

SQL Syntax-Alter Table-Commit Work-Create Table-View-Delete-Drop-Insert-Grant- Revoke Rollback-Select-Select Into-Update-Sub query with ANY and ALL-Inner Join and Outer Join.

UNIT-V (15 Hours)

Relational Implementation- Primary Key, Composite Key and Foreign Keys- Relationships in the Relational Model Introduction to ER Model- One-to-One, One to- Many, Many to Many relationship- Examples of DDL – Data Definition Language-DQL – Data Query Language- DML— Data Manipulation Language-DCL – Data Control Language.

RECOMMENDED TEXTBOOKS

- 1. DATABASE SYSTEMS USING ORCLE Nilesh Shah, 2nd edition, PHI. (UNIT-I: Chapters 1 & 2 UNIT-II: Chapters 3 & 4 UNIT III: Chapters 5 & 6 UNIT-IV: Chapters 10 & 11
- 2. UNIT-V: Chapters 12,13 & 14)

REFERENCE BOOKS:

- 1. DATABASE MANAGEMNET SYSTEMS Arun Majumdar & Pritimoy Bhattacharya, 2007, TMH.
- 2. DATABASE MANAGEMETN SYSTEMS Gerald V. Post, 3rd edition, TMH.

GUIDELINES TO THE QUESTION PAPER SETTERS Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40	
	TOTAL MARKS				

Break up of questions for theory

UNITS	SECT	ΓΙΟΝ A	SECTION B		SEC	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	3	-	2	-	2	-
III	2	-	1	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
SECTION A - 12		SECTION A - 12 SECTION B - 7		- 7 SECTION C - 6		

CORE PAPER - X FINANCIAL MANAGEMENT

SUBJECT CODE:	THEORY & PROBLEM	MARKS: 100
SEMESTER: IV	CREDITS: 4	TOTAL HOURS: 75

(Common to B.Com (GEN), B.Com (CS), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)

COURSE FRAMEWORK

It uses a structure that allows us to identify and access data in relation to another piece of data in the database.

COURSE OUTCOME:

On completion of the course the students will be able to

- 1. To Identify the fundamentals of financial management, role of financial manager and sources offinance
- 2. To Demonstrate Capital structure planning and analyse the types of leverages
- 3. To Demonstrate the concepts in Financial Management which are important to make managerial Decisions.
- 4. To Demonstrate capital budgeting, working capital Management and dividend policies which are usedin making financial decisions
- 5. To Able and confident to tackle practical financial problems of business.

UNIT I (12 Hours)

Financial Management – Introduction – Scope – Finance and other related disciplines –Function of Finance – Functions of Finance Manager in 21st C e n t u r y . Financial Goals: Profit Maximization Vs Wealth Maximization – Time value of money-perpetuity –CMI Amortization.

UNIT II (17 Hours)

Cost of Capital – Significance of the cost of Capital – Determining Component costs of Capital – Cost of Equity - Cost of Preference share capital – Cost of Debt - Cost of Retained Earnings – Weighted Average cost of capital.

UNIT III (17 Hours)

Capital structure – Importance – Factors affecting Capital structure - Determining Debt – Equity proportion – Theories of capital structure –Net Income Approach – Net Operating Income Approach – M.M Approach & Traditional Approach - Leverage concept –Operating Leverage – Financial Leverage and Combined Leverage.

UNIT IV (12 Hours)

Dividend policy – Objective of Dividend Policies - Types of Dividend Policies - Factors Affecting Dividend Policy – Dividend Theories: Walter's - Gordons's – M.M Hypothesis – Forms of Dividend

UNIT V (17 Hours)

Working Capital – Components of working Capital – Operating Cycle – Factors influencing working capital – Determining working capital requirements. Capital Expenditure Capital Budgeting Techniques: Discounted Cash flow technique: Net Present Value - Internal Rate of Return- Profitability Index, Non – Discounted Cash Flow Techniques: Pay back methods – Accounting Rate of Return

THEORY: 20% PROBLEMS: 80%

RECOMMENDED TEXTBOOKS

- 1. M.Y.Khan and P.K.Jain Basic Financial Management, Tata McGraw-Hill Education
- 2. Dr. A. Murthy, Financial Management, Margham Publications

REFERENCE BOOKS

- 1. Pandey I.M.: Financial Management, Vikas Publishing House Pvt Ltd
- 2. Maheswari . S.M.: Financial Management, Sultan Chand & Sons
- 3. Prasanna Chandhra: Financial management theory and practice, McGraw-Hill Education
- 4. Dr. Rustagi P R, Fundamentals of Financial management, Taxman's publication, 14th edition
- 5. Paramasivan C & Subramanian T, Financial Management, New Age International Publishers

E-LEARNING RESOURCES

- 1. https://www.managementstudyguide.com/financial-management.htm
- 2. https://corporatefinanceinstitute.com/resources/knowledge/finance/cost-of-capital/
- 3. https://www.investopedia.com/terms/c/capitalbudgeting.asp
- 4. https://efinancemanagement.com/dividend-decisions
- 5. https://cleartax.in/s/working-capital-management-formula-ratio
- 6. https://books.google.co.in/books?isbn=812591658X

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40
TOTAL MARKS				

Break up of questions for theory and problem $% \left\{ \mathbf{r}^{\prime}\right\} =\left\{ \mathbf{r}^{\prime}\right\} =\left\{$

UNITS	SECT	ΓΙΟΝ A	SECTION B		SECT	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	1	1	-	-	-
II	2	1	-	1	-	1
III	1	1	1	1	-	1
IV	1	1	-	1	-	1
V	1	1	-	2	-	1
TOTAL	7	5	2	5	-	4
SECTION A-12		SECT	ION B-7	SECT	ION C-4	

CORE PAPER - XI RESEARCH METHODS IN BUSINESS

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: IV	CREDITS: 4	TOTAL HOURS: 75

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

COURSE FRAMEWORK

Research Methodology is a design process which consists of step by step approach leading towards the conclusion of substantial results.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To identify the various kinds of research, objectives of doing research, research process.
- 2. Apply various research designs and sampling techniques.
- 3. Compare and analyse various data collecting methods, data processing and analysis.
- 4. Identify types of hypothesis and use different testing methods
- 5. Prepare research report and apply research methods in various areas.

UNIT I (15 Hours)

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

UNIT II (15 Hours)

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, un- restricted sampling. Types: Quota sampling, Cluster sampling, Area sampling, Multi stage sampling, convenience sampling and purposive sampling.

UNIT III (15 Hours)

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.

UNIT IV (15 Hours)

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.

UNIT V (15 Hours)

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.

RECOMMENDED TEXTBOOKS

- 1. Research Methodology by Dr.P.Ravilochanan Margham Publications (2012)
- 2. Research Methodology: Methods and Techniques Paperback Abridged, Audiobook,Boxset 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

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40
TOTAL MARKS				

Break up of questions for theory

UNITS	SECT	ΓΙΟΝ A	SECTION B		SECT	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	-	1	-	1	-
II	2	-	2	-	2	-
III	3	-	1	-	1	-
IV	2	-	2	-	1	-
V	3	-	1	-	1	-
TOTAL	12	-	7	-	6	-
Section A-12		Secti	on B-7	Secti	on C-6	

CORE PAPER-XII RDBMS WITH SQL-PRACTICAL

SUBJECT CODE:	PRACTICAL	MARKS: 100
SEMESTER: IV	CREDITS: 4	TOTAL HOURS: 75

COURSE FRAMEWORK

It uses a structure that allows us to identify and access data in relation to another piece of data in the database.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To transform an information model into a relational database schema and to use a data definition language and/or utility to implement the schema using a DBMS.
- 2. To use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
- 3. To Formulate query, using SQL, solutions to a broad range of query and data update problems.
- 4. To Use a desktop database package to create, populate, maintain, and query a database.
- 5. To transform an information model into a relational database schema and to use a data definition language and utilities to implement the schema using a DBMS.

RDBMS SQL Exercises

- 1. SOL Retrieve data from tables
- 2. SQL Boolean and Relational operators
- 3. SQL Wildcard and Special operators
- 4. SQL Aggregate Functions
- 5. SQL Formatting queryoutput
- 6. SQL Querying on Multiple Tables
- 7. FILTERING and SORTING on HR Database

SQL JOINS

- 1. SOLJOINS
- 2. SQL JOINS on HR Database

SQL SUBQUERIES

- 1. SQL SUBQUERIES
- 2. SQL SUBQUERIES on HR Database
- 3. SQL Union
- 4. SQL View
- 5. SQL User Account Management

HOSPITAL DATABASE

- 1. Introduction
- 2. BASIC, SUBQUERIES, and JOINS

EMPLOYEE DATABASE

- 1. BASIC queries on employee Database
- 2. SUBQUERIES on employee Database

STUDENT DATABASE

- 1. BASIC queries on Student Database
- 2. SUBQUERIES on Student Database

ALLIED – IV BUSINESS STATISITICS - II

SUBJECT CODE:	THEORY & PROBLEM	MARKS: 100
SEMESTER: IV	CREDITS: 5	TOTAL HOURS: 75

(Common to B.Com (GEN), B.Com (CS), B.Com (BM), B.Com (MM), B.Com (AF), B.Com (ISM), BBA)

COURSE FRAME WORK

To introduce basic concepts of Statistics and computing statistical aspects.

COURSE OUTCOME

- 1. Outline Index Numbers: Simple aggregative, simple average of price relative method, weightedaverage of price relative method and weighted aggregative method, Fixed and Chain Base Index, Cost of Living Index
- 2. Analysis of sampling method, sampling error, central limit theorem and estimating population parameters, computing mean population for large sample and small sample
- 3. Evaluate correlation between two variables and identify its types with use of rank correlation.
- 4. Formulate the simple linear regression equation for a set of data, uses of regression, and difference between correlation and regression.
- 5. Discuss about the Time Series Analysis using Secular trend: Graphic or free hand method, Method of semi average, Moving average and least square
- 6. Explain Method of least squares to fit a straight Line-Seasonal variation: Method of simpleaverage.

UNIT I (15 Hours)

Correlation Analysis – Meaning, Definition, Significance and Types of Correlation, Karl Pearson's Coefficient of Correlation – spearman's Rank Correlation.

UNIT II (15 Hours)

Regression Analysis- Meaning and Importance – Regression Lines and Regression equations-Xon Y, Y on X, and Properties of Regression Coefficients – Uses of Regression – Difference between Correlation & Regression.

UNIT III (15 Hours)

Time Series Analysis – Meaning, Need and Components of Time Series – Different Methods –Simple Average Method- Free Hand, Semi Average, Moving Average and Least Square Method-Seasonal Indices.

UNIT IV (15 Hours)

Index Numbers – Definition Usage, Methods of Construction of Index Numbers – Types – Unweighted and weighted Index Numbers Simple, Aggregate, Price Relative Methods-Laspeyres, Paasche's , Bowley's and Fisher's Index Numbers – Time and Factor Reversal Tests– Cost of Living Index.

UNIT V (15 Hours)

Meaning of Sampling - Probability Sampling Methods: Simple Random Sampling - Stratified Sampling-Systematic Sampling-Cluster Sampling-Multi stage Sampling, Non-probability sampling methods: Convenience Sampling - Judgmental Sampling-Quota Sampling - Snowball Sampling- Sampling error and standard error relationship between sample size and standard error.

THEORY: 20% PROBLEMS: 80%

RECOMMENDED TEXTBOOKS

- 1. Statistical Methods- S.Gupta Sultan Chand & Sons
- 2. Statistics –P.R. Vital- Margham Publications.

REFERENCE BOOKS

- 1. Elements of Statistical Hypothesis E.L.Lehmann Johu Wiley &Sons.
- 2. Practical Statistics R.S.N.Pillai & B.Bhagavathi S.Chand & Company.

E-LEARNING RESOURCES

- 1. https://books.google.co.in/books?isbn=8122415229
- 2. https://books.google.co.in/books?isbn=8131301362
- 3. https://books.google.co.in/books?isbn=8122415229

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
C	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40	
	TOTAL MARKS				

Break up of questions for theory and problem

UNITS	SECT	ΓΙΟΝ A	SECTION B		SEC	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	1	1	1	-	1
II	1	1	-	1	-	1
III	1	1	-	2	-	1
IV	1	1	-	1	-	1
V	2	1	1	-	-	-
TOTAL	7	5	2	5	-	4
SECTION A 12		SECT	ION B 7	SECT	ION C 4	

ENVIRONMENTAL STUDIES

SUBJECT CODE:	THEORY	100 MARKS
SEMESTER: IV	CREDITS: 2	TOTAL HOURS: 30

COURSE FRAMEWORK:

• This course introduces the concepts of Environmental Studies.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To know the importance of environmental studies and methods of conservation of natural resources.
- 2. To describe the structure and function of an ecosystem.
- 3. To identify the values and conservation of bio-diversity.
- 4. To explain the causes, effects and control measures of various types of pollutions.
- 5. To select the appropriate methods for waste management.

UNIT I: (6 Hours)

Multidisciplinary nature of environmental studies Definition, scope and importance.

UNIT II: (6 Hours)

Natural Resources: Renewable and non-renewable resources: Natural resources and associated problems. - Forest resources: Use and over-exploitation, deforestation, case studies. -Timber extraction, mining, dams and their effects on forest and tribal people. - Water resources: Use and over-utilization of surface and ground water - floods, drought, conflicts over water, dams-benefits and problems. - Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. - Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies. Land resources: Land asa resource, land degradation, man induced landslides, soil erosion and desertification. Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.

UNIT III: (6 Hours)

Ecosystems - Concept of an ecosystem. -Structure and function of an ecosystem. - Producers, consumers and decomposers. - Energy flow in the ecosystem. - Ecological succession. - Food chains, food webs and ecological pyramids. - Introduction, types, characteristic features, structure and function of the following ecosystem: - . Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

UNIT-IV: (6 Hours)

Biodiversity and its conservation

- Introduction Definition: genetic, species and ecosystem diversity. Bio geographical classification of India Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic- and option values Biodiversity at global, National and local levels. India as a megadiversity nation Hot-sports of biodiversity.
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts.
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

UNIT V: (6 Hours)

Environmental Pollution

Definition

- Cause, effects and control measures of :-
- a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution
- e. Noise pollution f. Thermal pollution g. Nuclear hazards
- Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution.
- Pollution case studies.
- Disaster management: floods, earthquake, cyclone and landslides.

PRESCRIBED BOOKS:

- **1.** Environmental studies St Joseph College Edition
- 2. Environmental studies Dr.D.D.Mishra S.Chand

REFERENCE BOOKS:

- **1.** Environmental studies Dr. J.P. Sharma University Science Press.
- 2. Introduction to Environmental Studies Dr. Mahainta K. Kalita Asiau Books.

SOFT SKILLS - IV QUANTITATIVE APTITUDE

SUBJECT CODE:	PROBLEM	MARKS:100
SEMESTER: IV	CREDITS: 3	TOTAL HOURS: 30

COURSE FRAMEWORK

Quantitative Aptitude is probably the most important section of any competitive exam. The quantitative aptitude is the section where numerical questions are asked to test the mathematical skills, accuracy and speed of the students.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To make students familiarize in quantitative aptitude.
- 2. 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.
- 3. To use their logical thinking and analytical abilities.
- 4. To solve Quantitative aptitude questions from company specific and other competitive tests.
- 5. To solve questions related to Time and distance and time and work etc. from company specific and other competitive tests.

UNIT-1 (6 HRS)

Divisibility – HCF and LCM

UNIT-II (6 HRS)

Averages – Percentage – Ratio and Proportions

UNIT-III (6 HRS)

Time and work – Time and Distance.

UNIT-IV (6 HRS)

Simple Interest – Compound Interest – Profit and Loss

UNIT-V (6 HRS)

Area – Volume and surface Areas.

Prescribed Text

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

Reference Books

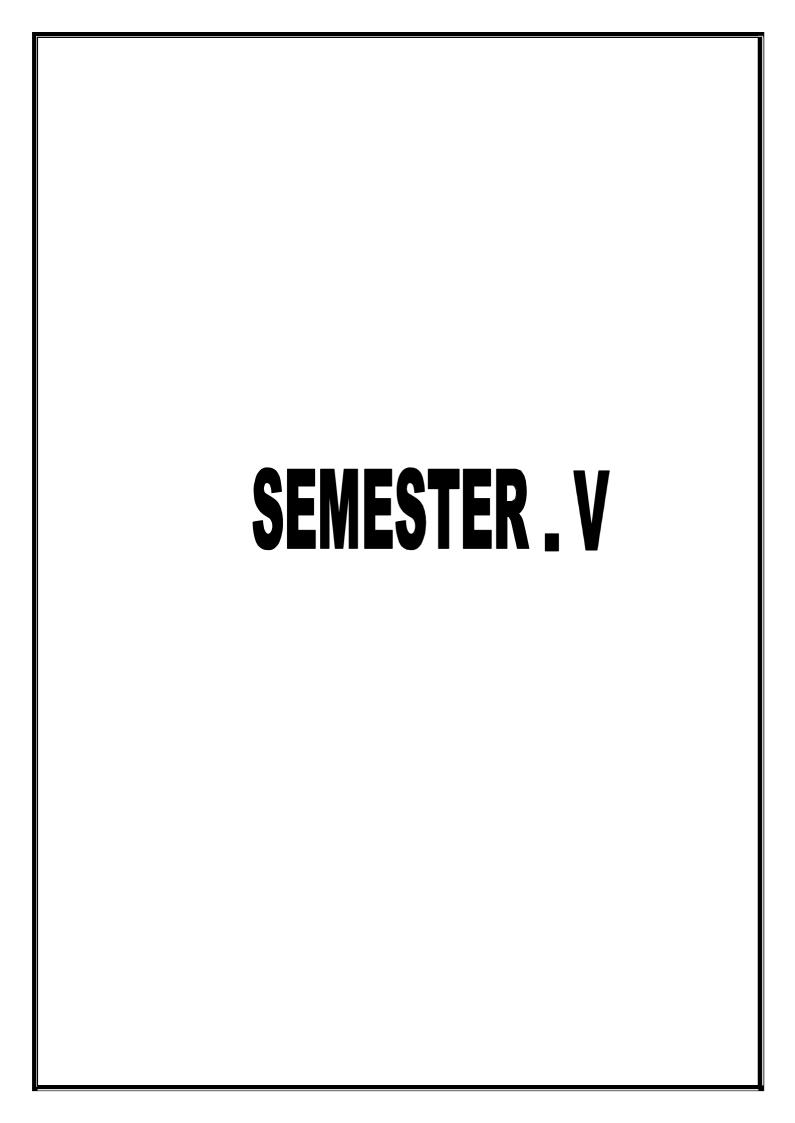
- 1. Govind Prasad Singh and Rakesh Kumar, Text Book of Quickest Mathematics (For all Competitive Examinations), Kiran Prakashan, 2012
- 2. R.S. Aggarwal, Objective Arithmetic, S. Chand & Company, New Delhi, 2005

Question Paper Pattern:

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

Distribution of Questions:

Sections	Units	No. of
Sections	Units	Problems
	Unit – 1	10
	Unit – 2	10
Section A	Unit – 3	10
	Unit – 4	10
	Unit – 5	10
	TOTAL	50



CORE PAPER - XIII PROGRAMMING IN PYTHON

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

(Common to B. Sc. (CS), B.C. A, B.Sc. (IT), B. Com (ISM))

COURSE FRAMEWORK

Master your language with lessons, quizzes, and projects designed for real-life scenarios.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To identify how to use lists, tuples, and dictionaries in Python programs.
- 2. To apply how to identify Python object types.
- 3. To demonstrate how to write loops and decision statements in Python.
- 4. To learn how to write functions and pass arguments in Python.
- 5. To learn how to build and package Python modules for reusability.

UNIT I (18 Hours)

Introduction: Introduction to Python, Python Variables, Expressions, Statements: Variables, Keywords, Operators & Operands, Expressions, Statements, Order of Operations, String Operations, Comments, Keyboard Input. Functions: Type Conversion function, Math functions, Composition of Functions, defining own function, Parameters, Arguments, Importing Functions.

UNIT II (18 Hours)

Conditions & Iterations: Conditions, Modulus Operator, Boolean Expression, Logical Operators, if, if-else, if-elif-else, nested conditions. Iteration while, for, break, continue, Nested loop.

UNIT III (18 Hours)

Recursion: Python recursion, Recursion error. Strings: Accessing values in String, Updating String, Slicing String, String Methods – upper (), find(), lower(), capitalize(), count(), join(), len(), isalnum(), isalpha(), is digit(), is lower(), isnumeric(), isspace(), isupper() max(), min(), replace(), split().

UNIT IV (18 Hours)

Structures & Functions: List: Introduction, Traversal, Operations, Slice, Methods, Delete element, Difference between Lists and Strings. Dictionaries: Introduction, Brief idea of Dictionaries & Lists. Tuples: Introduction, Brief idea of Lists & Tuples, Brief idea of Dictionaries & Tuples. Date & Time, Modules, Defining Functions, Exit function, Default arguments.

UNIT V (18 Hours)

Classes & Objects: Creating class, Instance objects, accessing attributes, Built in class attributes, destroying objects, Inheritance, Method overriding, Overloading methods, Overloading

operators, Data hiding. Exceptions in Python, Detecting and Handling Exceptions, Exceptions as Strings, Raising Exceptions, Assertions, Standard Exceptions.

RECOMMENDED TEXTS

1. Allen Downey, Jeffrey Elkner, Chris Meyers, —How to Think Like a Computer Scientist - Learning with Python, Green Tea Press, 2002.

REFERENCE BOOKS

- 1. Prentice Hall of India, 2014.
- 2. Mark Lutz, —Learning Python: Powerful Object-Oriented Programming, Fifth Edition, O'Reilly, Shroff Publishers and Distributors, 2013.

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total		
A	Answer any 10 out of 12	1-12	3	30		
В	Answer any 5 out of 7	13-19	6	30		
С	Answer any 4 out of 6	20-25	10	40		
	TOTAL MARKS					

DISTRIBUTION OF QUESTIONS:

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

CORE PAPER - XIV ENTREPRENEURIAL DEVELOPMENT

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

(Common to B.Com (GEN), B.Com (CS), B.Com (MM), B.Com (AF), B.Com (ISM), B.Com (BM), BBA)

COURSE FRAMEWORK

This course studies found a positive relationship between economic growth, a meaningful enterprise development support system, education and training.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To develop entrepreneurial awareness among students.
- 2. Identify the process of entrepreneurship and institutional supports available to entrepreneurs and to prepare their mind set for thinking entrepreneurship as career.
- 3. Examine the process of starting a new venture and create business plan.
- 4. Identify the role of government in organizing EDPs.
- 5. Identify the role of entrepreneur in economic growth analyse strategic approaches in business

UNIT I (15 Hours)

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

UNIT II (23 Hours)

Entrepreneurial Development Agencies - Commercial Banks - District Industries Centre - National Small Industries Corporation - Small Industries Development Organisation - Ministry of Micro, Small & Medium Enterprises (MSME)- Prime Minister Employment Generation Programme - Pradhan Mantri Yuva Yojana - All India Financial Institutions - IDBI - IFCI - ICICI - IRDBI.

UNIT III (18 Hours)

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

UNIT IV (15 Hours)

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

UNIT V (18 Hours)

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 - problems – steps taken by Government- Women and Self Help Groups. (SHGs)

RECOMMENDED TEXTBOOKS

- 1. Gupta, D. C., & Srinivasan, D. N. Entrepreneurship Development in India Sultan Chand& Sons, (2001).
- 2. Khanka, S. S. Entrepreneurial development. S. Chand Publishing, (2006).

REFERENCE BOOKS

- 1. Desingu Setty, E., & Krishna Moorthy, P. Strategies for developing women entrepreneurship. Akansha Pub. House, (2010).
- 2. Drucker, P. F. Innovation and Entre-preneurship: Practice and Principles. Harper & Row, (1986).
- 3. Gupta, M. Entrepreneurial Development Raj Publishing House, (2006).
- 4. Shankar, R.Entrepreneurship Theory & Practice Vijay Nicole Imprints Private Ltd
- 5. Suresh, J. Entrepreneurial Development Margham Publications, (2002).

E-LEARNING RESOURCES

- 1. http://www.yourarticlelibrary.com/entrepreneur/entrepreneurshipcharacteristicsimportancetyps -and-functions-of-entrepreneurship/5228
- 2. https://landor.com/thinking/eight-principles-of-innovation
- 3. http://www.simply-strategic-planning.com/innovation-and-entrepreneurship.html
- 4. https://www.slideshare.net/sahilkamdar1/institutional-support-in-entrepreneurship
- 5. https://www.businessmanagementideas.com/entrepreneurship-2/institutional-supportsystem-for- entrepreneurs/18184
- 6. https://www.entrepreneur.com/article/323660
- 7. https://www.entrepreneur.com/article/314723

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total		
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30		
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30		
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40		
	TOTAL MARKS					

Break up of questions for theory

UNITS	SECT	TION A	SECTION B		SEC	ΓΙΟΝ C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	3	-	2	-	2	-
III	2	-	1	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
SECTION A-12		SECT	ION B-7	SECT	ION C-6	

CORE PAPER - XV MANAGEMENT INFORMATION SYSTEM

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

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

COURSE FRAMEWORK

To facilitate the importance of information systems in business and familiarize the concepts of system and databases.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making.
- 2. To analyze business information and systems to facilitate evaluation of strategic alternatives.
- 3. To effectively understand the classification of computers and database management system.
- 4. To demonstrate an understanding of system development lifecycle and functional information system.
- 5. To make the student understand the key features of decision support system and business process outsourcing.

UNIT I (20 Hours)

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

UNIT II (15 Hours)

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

UNIT III (15 Hours)

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

UNIT IV (20 Hours)

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

UNIT V (20 Hours)

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

RECOMMENDED TEXTBOOKS

- 1. Mudrick & Ross, Management Information Systems, 3rd Edition, Prentice Hall ofIndia
- 2. Sadagopan, "Management Information Systems" Prentice- Hall of India
- 3. CSV Murthy-"Management Information Systems" Himalaya publishing House.

REFERENCE BOOKS:

1. 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

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
Section A	Definition/ Principle Answer any 10 out of 12 questions (each in 50words)	1-12	3	30
Section B	Short Answers Answer any 5 out of 7 questions (each in 300words)	13-19	6	30
Section C	Essay Answer any 4 out of 6 questions (each in 1200words)	20-25	10	40
	TOTAL MARKS		•	100

Break up of questions for theory

UNITS	SECTION A		SECT	TION B	SECT	ION C
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	-	1	-	1	-
II	2	-	1	-	2	-
III	3	-	2	-	1	-
IV	2	-	2	-	1	-
V	3	-	1	-	1	-
TOTA	12	-	7	-	6	-
L						
SECTION A-12		SECT	TION B-7	SECT	ION C-6	

CORE PAPER - XVI PYTHON PROGRAMMING PRACTICAL

SUBJECT CODE:	PRACTICAL	MARKS: 100
SEMESTER: V	CREDITS: 4	TOTAL HOURS: 90

(Common to B.Sc. (CS), B.C. A, B.Sc. (IT), B. Com (ISM))

COURSE FRAMEWORK

To learn and understand python looping, control statements and string manipulations.

COURSE OUTCOME

On completion of the course the students will be able.

- 1. To demonstrate Write, Test and Debug Python Programs.
- 2. To implement Conditionals and Loops for Python Programs.
- 3. To implement the use functions and represent Compound data using Lists, Tuples and Dictionaries.
- 4. To implement Read and write data from & to files in Python.
- 5. To develop the skill of designing Graphical User Interfaces in Python

(18 Hours)

- 1. Write a python program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon user's choice.
- Write a Python program to calculate total marks, percentage and grade of a student. Marks obtained in each of the three subjects are to be input by the user. Assign grades according to the following criteria:

Grade A: Percentage >=80

Grade B: Percentage>=70 and <80 Grade C: Percentage>=60 and <70 Grade D: Percentage>=40 and <60 Grade E: Percentage<40

3. Write a program to sum all the elements from n1 to n2 where n1 and n2 are positive integers.

(18 Hours)

- 4. Input an array of n numbers and find separately the sum of positive numbers and negative numbers.
- 5. Write a program to print sum and multiply two matrices.
- 6. Write a program to find the roots of a quadratic equation

(18 Hours)

- 7. Write a Python Program to check whether the given string is palindrome or not using built in string manipulation methods.
- 8 Write a Python Program to read a word and prints the number of letters, vowels and percentage of vowels in the word using dictionary
- 9. Write a Python Program to check a given sentence is a pangram or not using function/ Module.

(18 Hours)

- 10. Write a python program, using user-defined functions to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user.
- 11. Write a python program to display the first n terms of Fibonacci series.
- 12 Write a python program to find sum of the following series for n terms: 1 2/2! + 3/3! n/n!
- 13. Write an Object Oriented Python program to create two Time objects: current Time, which contains the current time; and bread Time, which contains the amount of time it takes for a bread maker to make bread. Then we'll use add Time to figure out when the bread will be done. Write the print Timefunction to display the time when the bread will be done by the bread maker.

(18 Hours)

- 14. Write a python program to illustrate list
- 15. Write a python program to illustrate exception handling

ELECTIVE-I (INTER DISCIPLINARY ELECTIVE)

ADOBE PHOTOSHOP

SUBJECT CODE:	THEORY & PRACTICAL	MARKS: 100
SEMESTER: V	CREDITS: 5	TOTAL HOURS: 75

COURSE FRAMEWORK

Identify the major regions of the Photoshop workspace and explain the function of each. Menu bar and context menus, Options bar, Toolbox, palettes, and document windows.

COURSE OUTCOME

On completion of the course the students will be able

- 1. Use basic selection tools and edge refinement to isolate and edit parts of an image.
- 2. Manipulate layers through ordering, positioning, scaling, rotation, and adjustments.
- 3. Create composite images that demonstrate advanced selection and layering techniques.
- 4. Prepare images for Web and print output with appropriate sizing and resolution.
- 5. Apply painted masks, selection-based masks, gradient masks, and blend modes to create sophisticated image effects.

UNIT-I (15 Hours)

Introduction Variations in Photoshop Applications- History of Photoshop-Adobe Photoshop cs2-Adobe Photoshop cs3-Adobe Photoshop cs4-Adobe Photoshop cs5-Adobe Photoshop cs6-Adobe Photoshop cc- About Photoshop, Photoshop Features- advertisement creation, wallpapers, websites, jewelry creation, fashion designing, animations& 3d effects software development, and designs, Photo modification purpose. Key Board practice- shortcut keys & commands- Editing Photo in camera raw.

UNIT-II (15 Hours)

Photo lightings, temperature and color options for background shades- Creating Web Galleries, PDF converts- PDF Presentation, slide show presentation- Opening and Importing images, Creating Documents with different sizes- New document properties inserting of images. Rectangular Marquee Tool & Elliptical marquee tool & single row marquee tool, single column marquee Tool-Move tool, magic wand tool, quick selection tool, lasso tool, polygonal lasso tool, magnetic lasso tool- Crop tool, slice tool, slice select tool, eyedropper tool, color sampler tool, ruler tool, note tool, count tool.

UNIT-III (15 Hours)

Spot healing brush tool, healing brush tool, patch tool, red eye tool, brush tool, pencil tool, color replacement tool, mixer brush tool. Clone stamp tool, pattern tool, history brush tool, art history tool- eraser tool, background eraser tool magic eraser, gradient tool paint bucket tool- pen tool, freeform pen tool, add anchor point tool, delete anchor point tool, convert to point tool, horizontal type tool, vertical type tool, path selection tool, direct selection tool, custom shape tools, hand tool, zoom tool. Blur tool, sharpen tool, smudge tool, dodge tool, burn tool.

UNIT-IV (15 Hours)

Sponge Tool- About color information, Color Modes- Bitmap, RGB, CMYK, Grayscale. Working with layers & layer styles- Create New Layer-Layer Visibility-Layer Locking Options-Layer Blending Mode-Fill-Opacity- Layer Lock-Layer Options Menu- Create Droplet & Conditional Mode Change, Fit Image, Picture Package- Web Photo Gallery in Bridge cs5- Use the Merge to HDR command to combine multiple images & Export Layers to Files.

UNIT-V (15 Hours)

Define Brush Preset, Define Pattern, Free Transform, Scale, Rotate, Distort, Skew, Content-Aware Scale, Perspective. Auto Blend Layers, Auto Align layers, RGB or grayscale images-Adjustments, Exposure, Curves Color Balance, Black & White Selective Color, Match color Desaturate, replace color- Channel Mixer, Gradient Map Photo Filter Shadow/Highlight Invert, Equalize.

REFERENCES

- 1. Adobe Photoshop CC Classroom in a Book | First Edition | By Pearson by Andrew Faulkner and Conrad Chavez.
- 2. Adobe Photoshop: The World'S Best Imaging and Photo Editing Software by Bittu Kumar.

WEB REFERENCE:

- 1. www.tutorialspoint.com/e_commerce/
- 2. www.w3schools.come/ecommerce

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total		
A	Answer any 10 out of 12	1-12	3	30		
В	Answer any 5 out of 7	13-19	6	30		
С	Answer any 4 out of 6	20-25	10	40		
	TOTAL MARKS					

DISTRIBUTION OF QUESTIONS:

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

VALUE EDUCATION

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: V	CREDITS: 2	TOTAL HOURS: 15

COURSE FRAMEWORK:

- To teach and inculcate the importance of value based living.
- To give students a deeper understanding about the purpose of life.

COURSE OUTCOME:

On completion of the course the students will be able

- 1. To inculcate the value system in their real life scenarios.
- 2. To implement the role of culture and civilization, roles and responsibilities in the society.
- 3. To effectively follow Salient values for life such as forgiveness, ability to sacrifice, self -esteem, teamwork and creative thinking.
- 4. To reflect the human rights, social values and welfare of the citizen.
- 5. To consider the relation between values and personal behavior affecting the achievement of a sustainable future.

Unit 1: Education and Values

Definition, Concept, Classification, Theory, Criteria and Sources of values Aims and objectives of value education

Role and Need for value education in the contemporary society, Role of education in transformation of values in society

Role of parents, teachers, society, peer group and mass media in fostering values

Unit 2: Value Education and Personal Development

Human Values: Truthfulness, Sacrifice, Sincerity, Self-Control, Altruism, Scientific Vision, relevancy of human values to good life.

Character Formation towards Positive Personality Modern challenges of adolescents: emotions and behavior

Self-analysis and introspection: sensitization towards gender equality, differently abled, Respect for - age, experience, maturity, family members, neighbors, strangers, etc.

Unit 3: Human Rights and Marginalized People

Concept of Human Rights – Principles of human rights – human rights and Indian constitution – Rights of Women and children – violence against women – Rights of marginalized People – like women, children, minorities, transgender, differently abled etc

Social Issues and Communal Harmony Social issues – causes and magnitude - alcoholism, drug addiction, poverty, unemployment – communal harmony –concept –religion and its place in public domain –secular civil society

Unit 4: Value Education towards National and Global Development

Constitutional Values:(Sovereign, Democracy, Socialism, Secularism, Equality, Justice, Liberty, Freedom, Fraternity)

Social Values: (Pity and Probity, Self-Control, Universal Brotherhood).

 $Professional\ Values: (Knowledge\ Thirst,\ Sincerity\ in\ Profession,\ Regularity,\ Punctuality,\ Faith).$

Religious and Moral Values: (Tolerance, Wisdom, character).

Aesthetic Values: (Love and Appreciation of literature, fine arts) Environmental Ethical Values National Integration and international understanding.

Need of Humanistic value for espousing peace in society. Conflict of cross-cultural influences, cross-border education

Unit 5:

Guru Nanak Devji's Teachings

Relevance of Guru Nanak Devji's teachings' relevance to Modern Society

The Guru Granth sahib

The five Ks

Values and

beliefs

Rights and freedom (Right of equality, Right to Education, Right to Justice, Rights of women, Freedom of religion, Freedom of culture, Freedom of assembly, Freedom of speech) Empowerment of women

Concept of Langar

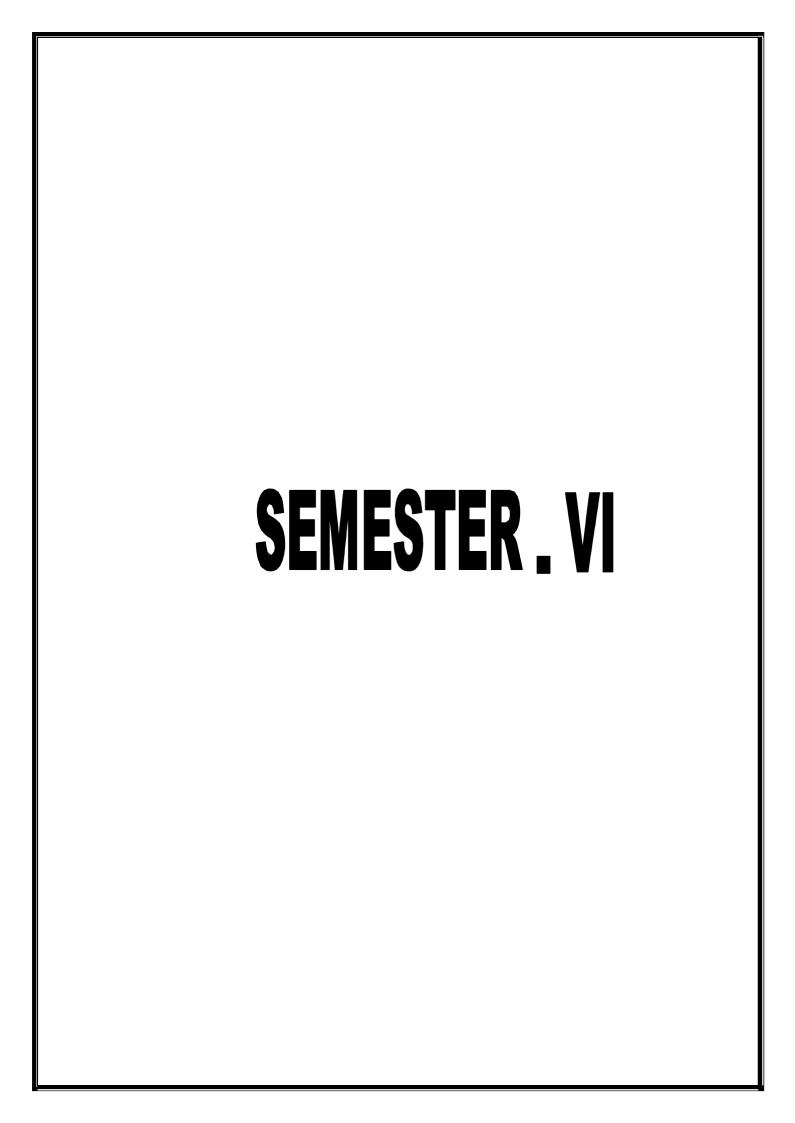
Eminent Sikh

personalities

REFERENCES

- 1. Dr. Abdul Kalam. My Journey-Transforming Dreams into Actions. Rupa Publications, 2013.
- 2. Steven R Covey, 8th Habit of Effective People (From Effectiveness to Greatness), FreePress, NewYork, 2005.
- 3. Prem Singh, G.J. (2004). 'Towards Value Based Education', UniversityNews. Vol. 42 (45): P.11-12.
- 4. V.R. Krishna Iyer. *Dialectics & Dynamics of Human Rights in India (Tagore Law Lectures) The Yesterday, Today and Tomorrow,* Eastern Law House (1999, Reprint 2018)

http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf



CORE PAPER - XVII ELEMENTS OF COST ACCOUNTING

SUBJECT CODE:	THEORY & PROBLEM	MARKS: 100
SEMESTER: VI	CREDITS: 4	TOTAL HOURS: 90

COURSE FRAMEWORK:

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

COURSE OUTCOME:

On completion of the course the students will be able

- 1. Aimed to familiarize the concept of cost accounting
- 2. Helps to gather knowledge on preparation of cost sheet in its practical point of view
- 3. To facilitate the idea and meaning of material control with pricing methods
- 4. Develop the knowledge about remuneration and incentives
- 5. To introduce the concept of overhead cost

UNIT I (10 Hours)

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.

UNIT II (15 Hours)

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

UNIT III (25 Hours)

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.

UNIT IV (20 Hours)

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.

UNIT V (20 Hours)

Meaning and definition - Importance-Classification - Primary Distribution of overheads, Secondary distribution of overheads - Absorption of overheads.

RECOMMENDED TEXTBOOKS

- 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

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 2 out of 4 questions (each in 1200 words)	20-23	20	40
TOTAL MARKS				

Break up of questions for theory and problem

UNITS	SEC	ΓΙΟΝ A	SECTION B		SECTION C	
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	2	-	1	-	-	
II	2	1	1	1	-	1
III	1	1	-	1	-	1
IV	1	1	-	1	-	1
V	2	1	-	2	-	1
TOTAL	8	4	2	5	-	4
SECTION A - 12		SECTI	ON B - 7	SECTI	ON C - 4	

CORE PAPER - XVIII PHP PROGRAMMING

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER: VI	CREDITS: 4	TOTAL HOURS: 90

COURSE FRAMEWORK:

Understand how server-side programming works on the web and how to receive and process form submission data.

COURSE OUTCOME:

On completion of the course the students will be able.

- 1. To demonstrate how server-side programming works on the web.
- 2. To identify How to receive and process form submission data.
- 3. To implement Reading and writing cookies.
- 4. To demonstrate a database in phpMyAdmin.
- 5. To implement Read and process data in a MySQL database.

UNIT I (15 Hours)

Evaluation of PHP-Basic Syntax-Defining variable and constant-PHP Data Type-Operator and Expression-Handling Html Form with PHP-Capturing Form Data-Dealing with Multi-value filed -Generating File uploaded Form-Redirecting a form after submission.

UNIT II (20 Hours)

Decisions and Loop-Making Decisions-Doing Repetitive task with Looping-Mixing Decisions and looping with Html-Function-What is a Function-Define a Function-Call by value and Call by reference- Recursive function.

UNIT III (15 Hours)

String -Creating and accessing String-Searching & Replacing String-Formatting String-String Related Library function.

UNIT IV (20 Hours)

Array-Anatomy of an Array-Creating index based and Associative array-Accessing array Element-Looping with Index based array-Looping with associative array using each () and foreach()-Some useful Library function.

UNIT V (20 Hours)

Generating Images with PHP-Basics of computer Graphics-Creating Image-Manipulating Image - Using text in Image. Sessions – Introduction-Start a PHP session-session variables-modify session-destroy Session-Cookies-Cookies-Start a PHP Cookies-Cookie variables-modify Cookie- destroy Cookie.

REFERENCE BOOKS:

- 1. The Joy of PHP Programming: A Beginner's Guide by Alan Forbes. ...
- 2. PHP & MySQL Novice to Ninja by Kevin Yank. ...
- 3. Head First PHP & MySQL by Lynn Beighley & Michael Morrison. ...
- 4. Learning PHP, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites
 - by Robin Nixon.

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total	
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30	
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30	
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40	
	TOTAL MARKS				

Break up of questions for theory

UNITS	SEC	ΓΙΟΝ A	SECTION B		SECTION C	
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	2	-	1	-
II	3	-	2	-	2	-
III	2	-	1	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
SECTION A-12		SECT	ION B-7	SECT	ION C-6	

CORE PAPER - XIX PHP PROGRAMMING PRACTICAL

SUBJECT CODE:	PRACTICAL	MARKS: 100
SEMESTER: VI	CREDITS: 4	TOTAL HOURS:90

COURSE FRAMEWORK:

PHP Basic syntax for variable types and calculations and Creating conditional structures

COURSE OUTCOME

On completion of the course the students will be able.

- 1. To demonstrate PHP Basic syntax for variable types and calculations.
- 2. To implement conditional structures.
- 3. To implement Storing data in arrays.
- 4. To identify using PHP built-in functions and creating custom functions.
- 5. To demonstrate POST and GET in form submission.

PHP LAB Exercises:

- 1. PHP Basic
- 2. PHP arrays
- 3. PHP for loop
- 4. PHP functions
- 5. PHP classes
- 6. PHP Regular Expression
- 7. PHP Date
- 8. PHP String
- 9. PHP Math
- 10. PHP JSON
- 11. PHP Searching and Sorting Algorithm

ELECTIVE II HUMAN RESOURCE MANAGEMENT

SUBJECT CODE:	THEORY	MARKS: 100
SEMESTER : VI	CREDITS: 5	TOTAL HOURS: 90

(Common to B.Com (GEN), B.Com (MM), B.Com(AF), B.Com(ISM), BBA)

COURSE FRAMEWORK:

To explain the importance of Human Resource Management and its Processes concerned with various management activities and to run an effective organization.

COURSE OUTCOME:

On completion of the course the students will be able.

- 1. To aiming to enable the students in Human Resources Management.
- 2. To introduce the students about placement and training.
- 3. To facilitate the knowledge about performance appraisal and different methods.
- 4. To provide an idea about different compensation policies.
- 5. To identify and appreciate the significance of the ethical issues in HR

UNIT I (16 Hours)

HRM Concepts and Functions, Role, Status and competencies of HR Manager - HR Policies – Emerging Challenges of Human Resource Management - Workforce diversity; Empowerment – Differences between personnel management and HRM

UNIT II (20 Hours)

Human Resource Planning – Job Analysis – Job Description, Job Specification and Job Evaluation – Recruitment and Selection – meaning - Process of Recruitment – Sources of Recruitment – Internal Sources – External Sources - Meaning and Process of Selection – Selection Tests And Interviews - Placement

UNIT III (18 Hours)

Induction – Mentoring – Concepts and Importance of Training and Development Needs- Training and Development Methods - on the Job Training – off the Job Training – Evaluating Training Effectiveness – Career Development.

UNIT IV (20 Hours)

Objectives and importance of Performance Appraisal - Methods and techniques of Performance Appraisal - Potential Appraisal, Type of transfers and promotions - Problems in Performance Appraisal - Essentials of Effective Appraisal System - Termination of Services.

UNIT V (16 Hours)

Compensation – Concept and Policies - Wage and Salary Administration – Methods of Wage Payments and Incentive Plans - Fringe Benefits – Performance linked compensation – Monetary and Non-Monetary benefits.

RECOMMENDED TEXTBOOKS

- 1. Human Resource Management. Dr. T.K. Avvai Kothai, Charulatha Publications.
- 2. Aswathappa, K. (2013). *Human resource management: Text and cases*. Tata McGraw-Hill Education.
- 3. Gupta, C. B. (2011). Human Resource Management: New Delhi. Sultan Chand & sons Educational publishers.

REFERENCE BOOKS

- 1. DeCenzo, D. A., Robbins, S. P., & Verhulst, S. L. (2016). Fundamentals of Human Resource Management, JohnWiley & Sons.
- 2. Dessler, G., & Varrkey, B. (2005). Human Resource Management, 15e. Pearson Education India.
- 3. Durai, P. (2009). Human Resource Management (Publisher: Dorling Kindersley (India) Pvt. Limited:
- 4. Prasad, L. M. (2006). Human Resource Management (Sultan Chand & Sons.
- 5. Rao, P. S. (2009). *Personnel and human resource management* (pp. 236-345). Himalaya Publishing House.

E-LEARNING RESOURCES

- 1. https://bohatala.com/impact-of-internal-and-external-environment-on-human-resourcemanagement
- 2. https://studiousguy.com/human-resource-planning/
- 3. https://corehr.wordpress.com/2013/12/04/transfer-and-promotion/
- 4. https://hrmpractice.com/employee-welfare/
- 5. https://www.mbaskool.com/business-concepts/human-resources-hr-terms/2390-quality-ofwork-lifeqwl.html

GUIDELINES TO THE QUESTION PAPER SETTERS

Question Paper Pattern

Section	Question Component	Numbers	Marks	Total
A	Answer any 10 out of 12 questions (each in 50 words)	1-12	3	30
В	Answer any 5 out of 7 questions (each in 300 words)	13-19	6	30
С	Answer any 4 out of 6 questions (each in 1200 words)	20-25	10	40
TOTAL MARKS				

Break up of questions for theory

UNITS	SECT	TION A	SECTION B		SECTION C	
	THEORY	PROBLEM	THEORY	PROBLEM	THEORY	PROBLEM
I	3	-	1	-	1	-
II	3	-	2	-	2	-
III	2	-	2	-	1	-
IV	2	-	1	-	1	-
V	2	-	1	-	1	-
TOTAL	12	-	7	-	6	-
SECTION A-12		SECTION B-7		SECTION C-6		

ELECTIVE III PROJECT

SUBJECT CODE:	PROJECT	MARKS: 100
SEMESTER : VI	CREDITS: 5	TOTAL HOURS: 90

COURSE FRAMEWORK:

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.

COURSE OUTCOME

- 1. Students will be able to practice acquired knowledge within the chosen area of technology for project development.
- 2. Identify, discuss and justify the technical aspects of the chosen project with a comprehensive and systematic approach.
- 3. Reproduce, improve and refine technical aspects for mini projects.
- 4. Work as an individual or in a team in development of mini projects.
- 5. Communicate and report effectively project related activities and findings

The team size shall not be more than 3 students, in case 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.