

B.COM 3RD YEAR HONOURS

Curriculum and detailed syllabus for E-commerce specialisation

semester-v

Code	Title	Marks	Credit Hours	Credits
5-01	Fundamentals of Electronic Communications	100	105	7
5-02	E-Commerce and Functional Business Systems	100	105	7
5-03	a) Internet and world wide web b)E-Commerce Technologies	50 50	105	7
	TOTAL	300	315	21

SEMESTER-VI

Code	Title	Marks	Credit Hours	Credits
6-04	Database Management System & System Analysis and Design	100	105	7
6-05	E-Commerce Application (Practical)	100	105	7
6-P	Project and Seminar Presentation	100	60	4
	TOTAL	300	270	18

Fundamentals of Electronic Communications.

Code: 5-01 (MARKS -100)

MODULE:1

- Data communication:** Forms of data transmission, Data transmission techniques, Bandwidths, Methods of data transmission, ISDN and its benefits, Asynchronous transfer mode, Multiplexing- Frequency Division Multiplexing, Time Division Multiplexing, Statistical Time Division Multiplexing. Switching techniques- Circuit Switching, Message switching, Packet Switching. Front End Processing. Applications of data communication.
- Networking:** Basic elements in networking, Network topology, Common network services- file services, print services, message services, application services, database services, Different types of network- LAN, WAN, MAN, VAN, SAN. Networks connecting devices. Open System Interconnection model(OSI)- different OSI layers.

MODULE:2

- Network Security:** Concept, Types of security threats, Levels of security.
- Electronic Communication and E- Marketing:** Identifying Web Presence Goals, The Browsing Behaviour Model, Online Marketing, E-advertising, Internet Marketing Trends, Target Markets, E Branding, Marketing Strategies.
- Major Projects in Electronic Communication:** Information Superhighway,

National Information Infrastructure, E Commerce Applications of the National Information Infrastructure, Benefits of E Commerce Applications of the National Information Infrastructure.

4. Social and Ethical Issues related to Electronic communication:

Suggested Readings:

1. Doing Business on the Internet E-COMMERCE (Electronic Commerce for Business) S. Jaiswal, Galgotia Publications.

2. E-Commerce An Indian Perspective, P.T. Joseph, S.J., PHI.

SUBJECT: E-Commerce and Functional Business Systems.

Code: 5-O2

MODULE:1

- 1. An overview of E- Commerce-** Operating System Services, Developer Services, Data Services, Application Services, Store Services, Client Services.
Types of E Commerce Solutions- Direct Marketing and Selling, Supply Chain Integration, Corporate Procurement, EDI.
- 2. Applications of Electronic Commerce-** Application of E Commerce in Direct Marketing and Selling, Value Chain Integration, Supply Chain Management, Corporate Purchasing, Financial and Information Services, Obstacles in adopting E-Commerce Applications, Future of E Commerce.
- 3. E-Strategy:** Information and Strategy, The virtual value chain, seven dimensions of ecommerce strategy, planning E-commerce project, E-commerce strategy and knowledge management, E-Business Strategy and Data Warehousing and Data Mining.
- 4. Customer –effective Web design:** Requirements of Intelligent Websites, Website Goals and Objectives, planning the budget, analyzing website structure, fixed versus flexible webpage design, choosing a page size ,website development tools, design alternatives, outsourcing web design, testing and maintaining websites.
- 5. Electronic Payment Systems-** Overview of Electronic Payment Systems, Cybercash (Customer to Merchant Payments, Peer to Peer Payments, Security).
Smart Card (Card Types, Closed or Open Security, Privacy, Card Costs, Non Card Costs), Electronic Banking, Electronic Fund Transfers.

MODULE:2

- 1. Business Models for E-Commerce-** Brokerage Model, Aggregator Model, Info-mediary model, Community Model, Value chain model, Manufacturer model, Advertising Model, Subscription model.
- 2. E-Commerce Marketing Concepts: Basic** marketing concepts for internet marketing, E-commerce marketing and branding strategies, Strengthening the customer relationship.
- 3. E-Commerce and Online service industries:** Online financial services. Online travel services. Online career services.
- 4. Mobile Commerce-** Growth of Mobile Commerce, Mobile Health Services, Wireless Applications, Technologies for Mobile Commerce, Wireless Spectrum, WAP, Origins of WAP, WAP Architecture, Wireless Datagram Protocol(WDP), Short Message Services, Circuit Switched Data (CSD), Unstructured Supplementary Services Data (USSD), General Packet Radio Service(GPRS), Wireless Technology (AMPS, TDMA, CDMA, GSM), Different generations in Wireless Communication, Security issues in cellular technology, Mobile commerce and its future in India.

Suggested Readings:

1. Doing Business on the Internet E-COMMERCE (Electronic Commerce for Business): S. Jaiswal, Galgotia Publications.

2. E-Commerce An Indian Perspective: P.T.Joseph, S.J., PHI.
- 3.E-Commerce Business.Technology. Society, Kenneth C. Laudon, Carol Guerico Traver, Pearson Education.
4. E-Commerce: Schneider, Thomson Publication

SUBJECT: a)Internet and world wide web (b)E-Commerce Technologies.

Code: 5-O3

A) Internet and world wide web: (MARKS- 50).

1.Working of the internet with TCP/IP: Origin of TCP/IP, TCP/IP communication architecture, Internet Architecture, Working of TCP/IP, TCP/IP Applications-FTP, Telnet, Trivial File Transfer Protocol, Simple Mail Transfer Protocol, Network File System.

TCP/IP implementations.

2.Internet Concepts: WWW, Internet and E-Commerce, Linking to the Internet, Internet Address, Internet Tools- Information Retrieval tools

(ftp, Gopher), Communication Tools (Email, FTP, Telnet, Usenet), Multimedia

Information Tools (Home page), Information Search Tools (Archie, Veronica, WAIS).

Domain Name System.

3.Intranet and Extranet:

Intranet, Intranet vs. Groupware, Intranet Hardware, Intranet Software, Intranet Services

(Web (HTTP) Publishing, HTML, Hypertext), Communication Systems (Email, Fax),

Software used in Electronic mail, Electronic Meeting Systems (Audio conferencing, Video Conferencing, Groupware), Extranet.

4. Internet Security:

Security on the internet, Network and Website Security Risks, Site Hacking, Security Incidents on the internet, security and email, network and website security,

Firewall (Concept, Components and Constituents, Benefits, Enterprise wide security Framework, secure physical infrastructure).

b) E-Commerce Technologies: (MARKS-50)

1.Overview of E-Commerce Technologies: Encryption overview, Elements of an encryption system, Secret key encryption, Public-key encryption, Digital signatures, Digital Certificates, Cryptography export restrictions, Secure Sockets Layer (SSL),

Secure Electronic Transactions (SET), Smart Cards and its applications.

2.Electronic Data Interchange- Evolution, uses, Benefits, Working of EDI, EDI

Standards (includes variable length EDI standards), Cost Benefit Analysis of EDI, Electronic

Trading Networks, EDI Components, File Types, EDI Services,

EDI Software, Business Approach of EDI, EDIFACT (Overview, Structure, EDIFACT Software), Business Future of EDI, EDI Administration.

EDI Security, Security Mechanisms, Technological aspects (Smart Cards, Worm Disks, Biometrics), Security Mechanism.

3. Security Issues in E-Commerce Technologies- Introduction to Security, Passwords, Viruses, Firewalls, Encryption (PGP, SHTTP, SSL).

4. Enterprise Resource Planning- Evolution of ERP, Characteristics, Features,

Components, Need, ERP Vendors, Business Process Reengineering, Advantages of ERP Packages, Implementation of ERP Packages, Future of ERP Systems, Integrated SAP

Model, Integrated Data-Master Data, Transactional data, Integrated Processes, Pros and cons of integration, SAP Architecture and Integration.

Suggested Readings:

1. Doing Business on the Internet E-COMMERCE (Electronic Commerce for

- Business) S. Jaiswal, Galgotia Publications.
2. E-Commerce An Indian Perspective, P.T.Joseph, S.J., PHI.
 3. Electronic Commerce: Greenstein, Merylin, Tata Mc.Graw Hill

SUBJECT: Database Management System & System Analysis and Design.

Code: 6-O4

Database Management System :(MARKS-50)

1. Introduction to DBMS, architecture, administration roles, data dictionary.
2. Traditional models, three-level architecture, hierarchical model, network model and relational model, File organization, Security.
3. Relational model – definitions and properties, keys, integrity rules.
4. SQL constructs, embedded SQL , Query & Query Optimization Techniques.
5. Database design, conceptual, logical and physical models, ER diagram and model.
6. Normal forms (1NF, 2NF, 3NF, BCNF)
7. Indexing- Primary, Secondary, Multilevel.

Suggested Readings:

1. Data Base System Concepts, Korth, TMH
2. Data Base Management System, Leon, VIKAS
3. PL/SQL Programming, Ivan Bayross.

System Analysis and Design: (MARKS-50)

1. Overview of System analysis and design: Development life cycle (Waterfall, Spiral models).
2. Feasibility studies, Requirements determination, Logical design, Physical design, Program design, Risk and feasibility analysis, prototyping.
3. Information requirement analysis: Process modelling with physical and logical data flow diagrams.
4. System design: Process descriptions, Input/output controls, object modeling, Database design, User Interface design, Documentation, Data Dictionary, Development methodologies: Top down, bottom up, structured chart, decision table, decision tree.
5. Testing – Unit, integration, system, Acceptance, regression, Test Case generation.

Suggested Reading:

1. System Analysis & Design, Parthasarathi, EPH
2. Analysis & Design of Information Systems, Raja Raman, PHI

SUBJECT: E-Commerce Application (Practical)

Code: 6-O5(MARKS-100)

MODULE-1 HTML & DHTML

MODULE-2 CLEINT SIDE SCRIPTING (JSCRIPT)

MODULE-3 JAVA

1. OOPS Concept and Introduction to JAVA.
2. An overview of Java.
3. Data Types - variables and arrays.
4. Operators, Control statements.
5. Classes and objects.
6. Inheritance.

7. String and string buffer.
8. Packages.
9. Interfaces.
10. Exception handling.
11. Multithreaded Programming.
12. File Handling
13. Applets.

Suggested Reading:

1. Java Object Oriented Programming Paradigm, D Jana, PHI
2. JAVA 2- The Complete Reference, TMH