# SARDAR RAJA COLLEGE OF ENGINEERING, ALANGULAM

# **DEPARTMENT OF COMPUTER APPLICATIONS**



# SUBJECT : ELECTRONIC COMMERCE

- **CODE** : MC 9271
- CLASS : II MCA / IV SEM

STAFF: Mr. R.Sundar, Asst.Prof,

**DEPT. OF MCA.** 

MC9271

### UNIT I INTRODUCTION

Networks and Commercial Transactions - Internet and Other Novelties - Electronic Transactions Today - Commercial Transactions - Establishing Trust - Internet Environment -Internet Advantage - World Wide Web.

#### UNIT II SECURITY TECHNOLOGIES

Why Internet Is Unsecure - Internet Security Holes - Cryptography : Objective - Codes and Ciphers - Breaking Encryption Schemes - Data Encryption Standard - Trusted Key Distribution and Verification - Cryptographic Applications - Encryption - Digital Signature – Non repudiation and Message Integrity.

### UNIT III ELECTRONIC PAYMENT METHODS

Traditional Transactions : Updating - Offline and Online Transactions - Secure Web Servers - Required Facilities - Digital Currencies and Payment Systems - Protocols for the Public Transport - Security Protocols - SET - Credit Card Business Basics.

### UNIT IV ELECTRONIC COMMERCE PROVIDERS 9

Servers and Commercial Environments - Payment Methods - Server Market Orientation -Netscape Commerce Server - Microsoft Internet Servers - Digital Currencies - DigiCash - Using Ecash - Ecash Client Software and Implementation - Smart Cards - The Chip - Electronic Data Interchange - Internet Strategies, Techniques and Tools.

### UNIT VONLINE COMMERCE ENVIRONMENTS12

Introduction - How web works - Setting up the environment (LAMP server) - Programming basics - Print/echo - Variables and constants – Strings and Arrays – Operators, Control structures and looping structures – Functions – Reading Data in Web Pages - Embedding PHP within HTML – Establishing connectivity with MySQL database.

#### TEXT BOOKS

1. Pete Loshin, "Electronic Commerce", 4th Edition, Firewall media, An imprint of laxmi Publications Pvt. Ltd., New Delhi, 2004.

#### REFERENCES

- 1. Jeffrey F.Rayport and Bernard J. Jaworski, "Introduction to E-Commerce", 2nd Edition, Tata Mc- Graw Hill Pvt., Ltd., 2003.
- 2. Greenstein, "Electronic Commerce", Tata Mc-Graw Hill Pvt., Ltd., 2000.

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# SUBJECT DESCRIPTION AND OBJECTIVES

# **OBJECTIVES**

- Understanding of a broad range of Internet tools
- Exposure to options for developing basic Internet applications (Front Page; a little Javascript for form validation and totalling; VB.Net, and Active Server Pages for linkages to databases)
- Business models and applications
- Benefits and risks
- Developing an Internet Business Plan
- Explain how electronic commerce can be used to create a strategic competitive advantage for an enterprise
- Describe the some of the best practices in Ecommerce that are currently available to managers.

### **DESCRIPTION**

#### **E-Commerce Marketing**

E-Marketing is a crucial part of eCommerce and its effectiveness has a direct impact on commercial success. As the Internet becomes more and more multilingual and multicultural, more companies are realising that adopting a multilingual and multicultural website is a cost-effective way of meeting the needs of multilingual users and increasing sales internationally.

#### Systems Analysis and Design

Systematic approaches to the analysis and design of information systems that will be used in a business setting. Analysis and specification of system requirements will be covered, as well as design of system data, interfaces and processes.

#### **Data Management and Database Design**

Studies design of information systems from a data perspective for engineering and business applications; data modelling, including entity-relationship (E-R) and object approaches; user-centric information requirements and data sharing; fundamental concepts of database management systems (DBMS) and their applications; alternative data models, with emphasis on relational design; SQL; data normalization; data-driven application design for personal computer, server-based, enterprise-wide, and Internet databases; and distributed data applications.

#### **Strategies for e-Business**

This course introduces the student to the concepts and terminology of modern e-business approaches. It includes topics on marketing, web technologies, security, legal issues, search engines. The emphasis will be to develop an understanding of the underlying principles of e-business in order to choose a right strategy for an e-business.

# MICRO LESSON PLAN

Hours	LECTURE TOPICS	READING	
UNIT I - INTRODUCTION			
1	Networks and Commercial Transactions	R1	
2	Networks and Commercial Transactions	<b>R1</b>	
3	Internet and Other Novelties	R1	
4	Electronic Transactions Today (AV Class)	R1	
5	Commercial Transactions	<b>R1</b>	
6	Establishing Trust	<b>R1</b>	
7	Internet Environment	<b>R1</b>	
8	Internet Advantage	<b>R1</b>	
9	World Wide Web	<b>R1</b>	
UNIT II - SECURITY TECHNOLOGIES			
10	Why Internet Is Unsecure - Internet Security Holes	R1	
11	Cryptography : Objective	<b>R1</b>	
12	Codes and Ciphers	R1	
13	Breaking Encryption Schemes	R1	
14	Data Encryption Standard (AV Class)	R1	
15	Trusted Key Distribution and Verification	R1	
16	Cryptographic Applications - Encryption	R1	
17	Digital Signature	R1	
18	Non repudiation and Message Integrity	R1	
UNIT III - ELECTRONIC PAYMENT METHODS			
19	Traditional Transactions	R1	
20	Traditional Transactions : Updating	R1	
21	Offline and Online Transactions (AV Class)	R1	
22	Secure Web Servers	R1	
23	Required Facilities	R1	
24	Digital Currencies and Payment Systems	R1	
25	Protocols for the Public Transport	R1	
26	Security Protocols - SET	R1	
27	Credit Card Business Basics	R1	
UNIT IV - ELECTRONIC COMMERCE PROVIDERS			
28	Online Commerce Options	<b>R1</b>	
29	Functions and Features	<b>R1</b>	
30	Payment Systems : Electronic, Digital and Virtual	R1	
	Internet Payment System		
31	Account Setup and Costs	<b>R1</b>	
32	Virtual Transaction Process	<b>R</b> 1	
33	InfoHaus -Security Considerations	<b>R</b> 1	
34	CyberCash: Model - Security	<b>R1</b>	
35	Customer Protection (AV Class)	<b>R1</b>	
36	Client Application-Selling through CyberCash	<b>R1</b>	

	UNIT V - ONLINE COMMERCE ENVIRONME	NTS
37	Servers and Commercial Environments	<b>R</b> 1
38	Payment Methods	<b>R</b> 1
39	Server Market Orientation	R1
40	Netscape Commerce Server	<b>R1</b>
41	Microsoft Internet Servers - Digital Currencies	<b>R1</b>
42	DigiCash - Using Ecash	<b>R1</b>
43	Ecash Client Software and Implementation - Smart Cards	R1
44	The Chip - Electronic Data Interchange (AV Class)	<b>R</b> 1
45	Internet Strategies, Techniques and Tools	<b>R</b> 1

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