



## **5.0 Course Contents:**

### **Unit No.-I**

#### **Introduction to E-commerce**

- 1.1.1 Welcome to the course and Class introduction
- 1.1.2 Overview of the course objectives and outline
- 1.1.3 Business and Commerce
- 1.1.4 E-Business vs Ecommerce
- 1.1.5 How e-commerce differs from e-business
- 1.1.6 Unique Features of E-commerce technology
  - 1.1.6.1 Ubiquity o Global Reach o
  - 1.1.6.2 Universal Standards
  - 1.1.6.3 Information Richness
  - 1.1.6.4 Interactivity Information Density o
  - 1.1.6.5 Personalization / Customization o
  - 1.1.6.6 Social Technology/Social Marketing

### **Unit No.-II**

- 2.1 Types of E-commerce.
  - 2.1.1 .Business-to-Consumer (B2C)
  - 2.1.2 Business-to-Business (B2B)
  - 2.1.3 Consumer-to-Consumer (C2C)

### **Unit No.-III**

#### **3.1 Elements of E-commerce business model**

- 3.1.1 Web 2.0
- 3.1.2 Elements of E-Commerce Business Models.Customer value proposition,
- 3.1.3 Revenue model o Primary Revenue Models
- 3.1.4 Market Opportunity o Competitive Environment
- 3.1.5 Competitive Advantage
- 3.1.6 Market Strategy
- 3.1.7 Organizational Development
- 3.1.8 Management Team.

### **Unit No.-IV**

#### **4.1 Major business-to-consumer business modes**

- 4.1.1 B2C Business Models.
- 4.1.2 Portal o E-Tailor o Content Provider
- 4.1.3 Transaction Broker o Market Creator
- 4.1.4 Service Provider
- 4.1.5 Community Provider

### **Unit No.-V**

#### **5.1 Major business-to-business modes**

- 5.1.1 B2B Business Models.
- 5.1.2 E-distributor
- 5.1.3 E-procurement
- 5.1.4 Exchanges

- 5.1.5 Industry Consortia
- 5.1.6 Private Industrial Networks
- 5.1.7 Quiz

## **Unit No.-VI**

- 6.1 **Models in Emerging E-commerce**
  - 6.1.1 Business Models in Emerging E-commerce Areas
  - 6.1.2 Consumer-to-Consumer (C2C) Business Models
  - 6.1.3 Peer-to-Peer (P2P) Business Models
  - 6.1.4 M-commerce Business Models
  - 6.1.5 E-commerce Enablers
  - 6.1.6 How the Internet and the Web Change Business: Strategy, Structure, and Process
  - 6.1.7 Industry Structure
  - 6.1.8 Industry Value Chains
  - 6.1.9 Firm Value Chains

## **Unit No.-VII**

### **7.1 The Internet Infrastructure**

- 7.1.1 The Internet and World Wide Web (E-Commerce Infrastructure)
- 7.1.2 Introduction To Computers
- 7.1.3 Types of Computers o Introduction to Computer Networks
- 7.1.4 Introduction to Network Devices
- 7.1.5 Working of a Fire Wall o Types of Communication Media
- 7.1.6 Network Topologies
- 7.1.7 Internet, Intranet and Extranet
- 7.1.8 World Wide Web
- 7.1.9 Hypertext o Markup Languages
- 7.1.10 Web Servers and Clients
- 7.1.11 Web Browsers
- 7.1.12 The Internet and the Web: Features
- 7.1.13 E-mail
- 7.1.14 Instant Messaging
- 7.1.15 Search Engines
- 7.1.16 Intelligent Agents (Bots)
  - o Online Forums and Chat
- 7.1.18 Streaming Media o Cookies
- 7.1.19 New Web Features and Service
- 7.1.20 Quiz

## **Unit No.-VIII**

### **8.1 Electronic Data Interchange**

- 8.1.1 EDI
- 8.1.2 Definition
- 8.1.3 Difference between paper based and EDI based purchasing process
- 8.1.4 Model used in paper based purchasing process
- 8.1.5 Description of the model used in paper based purchasing process
- 8.1.6 Model used in EDI based purchasing process
- 8.1.7 Description of the model used in EDI based purchasing process
- 8.1.8 Examples of EDI based purchasing process
- 8.1.9 **Benefits of EDI based purchasing process**
- 8.1.10 Quiz

## **Unit No.-IX**

### **9.1 Advertisement on the Web**

- 9.1.1 Introduction to web advertisement
- 9.1.2 Types of advertisement
- 9.1.3 Features of web advertisement
- 9.1.4 Issues in web advertisement
- 9.1.5 Difference of Mass marketing, Direct marketing and Interactive marketing

## **Unit No.-X**

### **10.1 E-commerce Security System**

- 10.1.1 SECURITY
- 10.1.2 Introduction to web security environments
- 10.1.3 Goals of security
- 10.1.4 Types of internet frauds
- 10.1.5 Dimensions of e-commerce security
- 10.1.6 Security threats in the E-commerce environment
- 10.1.7 Structure of e-commerce transaction
- 10.1.8 Vulnerable points in an e-commerce environment
- 10.1.9 Hacking and Cyber vandalism
- 10.1.10 Types of hacking
- 10.1.11 Credit card frauds
- 10.1.12 Spoofing
- 10.1.13 DOS attack
- 10.1.14 DDOS attack
- 10.1.15 Sniffing
- 10.1.16 Insider jobs
- 10.1.17 Assignment and quiz

## **Unit No.-XI**

### **11.1 E-commerce Security -Technology solutions**

- 11.1.1 Technology solutions of security problems
- 11.1.2 Encryption
- 11.1.3 Symmetric key encryption
- 11.1.4 Public key encryption
- 11.1.5 Public key encryption using Digital signatures
- 11.1.6 Hash algorithm
- 11.1.7 Public key cryptography with digital signature
- 11.1.8 Digital envelopes
- 11.1.9 Public key cryptography with Digital envelopes
- 11.1.10 Digital certificates and public key infrastructure
- 11.1.11 Certification authorities
- 11.1.12 Limits of encryption solutions
- 11.1.13 Quantum cryptography
- 11.1.14 SSL
- 11.1.15 S-HTTP
- 11.1.16 PPTP
- 11.1.17 Firewalls and proxy server
- 11.1.18 SET(secure electronic Transaction)

## **Unit No.-XII**

### **12.1 Online Payment System**

- 12.1.1 PAYMENT
- 12.1.2 Online Payment Basics 495
- 12.1.3 Types of payment system
- 12.1.4 Cash
- 12.1.5 Checking transfer
- 12.1.6 Credit card
- 12.1.7 Stored value
- 12.1.8 Accumulating balance
- 12.1.9 Dimensions of payment system

## **Unit No.-XIII**

### **13.1 Online Payment solutions**

- 13.1.1 Online Payment Basics
- 13.1.2 How an on-line credit card transaction works
- 13.1.3 Limitations of on-line credit card transactions
- 13.1.4 Digital wallets
- 13.1.5 Digital cash
- 13.1.6 On-line store value system
- 13.1.7 Smart cards as a stored value system
- 13.1.8 Digital accumulating balance system
- 13.1.9 Digital checking payment system
- 13.1.10 Assignment and quiz

## **Unit No.-XIV**

### **14.1 Online Auctions**

- 14.1.1 Auction Overview
- 14.1.2 Origins of Auctions
- 14.1.3 English Auctions
- 14.1.4 Dutch Auctions
- 14.1.5 First-Price Sealed-Bid Auctions
- 14.1.6 Second-Price Sealed-Bid Auctions
- 14.1.7 Open-Outcry Double Auctions
- 14.1.8 Sealed-Bid Double Auctions
- 14.1.9 Reverse (Seller-Bid) Auction
- 14.1.10 Online Auctions and Related Businesses

## **Unit No.-XV**

### **15.1 Web Server Hardware and Software**

- 15.1.1 Web Server Basics
- 15.1.2 Types of Web Sites
- 15.1.3 Web Clients and Web Servers
- 15.1.4 Dynamic Content
- 15.1.5 Various Meanings of “Server”
- 15.1.6 Web Client/Server Communication
- 15.1.7 Two-Tier Client/Server Architecture
- 15.1.8 Three-Tier and N-Tier Client/Server Architectures

- 15.1.9 Software for Web Servers
- 15.1.10 Operating Systems for Web Servers
- 15.1.11 Web Server Software
- 15.1.12 Finding Web Server Software Information

## **Unit No.-XVI**

### **16.1 Internet Utilities**

- 16.1.1 Electronic Mail (E-Mail)
- 16.1.2 E-Mail Benefits
- 16.1.3 E-Mail Drawbacks
- 16.1.4 Spam
- 16.1.5 Solutions to the Spam Problem
- 16.1.6 Web Site and Internet Utility Programs
- 16.1.7 Finger and Ping Utilities
- 16.1.8 Tracert and Other Route-Tracing Programs
- 16.1.9 Telnet and FTP Utilities
- 16.1.10 Indexing and Searching Utility Programs
- 16.1.11 Link-Checking Utilities
- 16.1.12 Remote Server Administration
- 16.1.13 Web Server Hardware
- 16.1.14 Server Computers
- 16.1.15 Web Server Hardware Architectures
- 16.1.16 Assignment and quiz

## **6.0 Teaching-Learning Strategies**

- Lectures , Handouts , Group Discussions, Presentations, Quizzes

## **7.0 Assignments**- Types and Number with calendar

## **8.0 Textbooks**

In the detail course outline, one may mention chapters of the textbook with the content topic(s).

1. Kenneth c. laudon and carol guercio traver E- commerce (business, technology, society) 2024
2. Gary P. Schneider,Printed by B and Jo Enterprise Pte Ltd in Singapore 2023, 2024

## **9. Suggested Readings**

- 9.1 Books
- 9.2 Journal Articles/ Reports