

60944 -DIPLOMA IN INFORMATION TECHNOLOGY & ENGINEERING

SEMESTER -I

09443 E-COMMERCE AND APPLICATIONS

RATIONALE

“Electronic commerce” or “Doing, business online” is becoming critical in three inter-related dimensions. Customer-to-business interactions, customer-to-customer, intra-business interactions and business-to-business interactions. Electronic Commerce facilitates the network form of organization where small flexible firms rely on other partner companies for component supplies and product distribution to meet changing customer demand more effectively. The transaction management aspect of electronic commerce enables firms to reduce costs by enabling better coordination in sales, production and distribution processes and automated supply chain network. Electronic Data Interchange (EDI), Electronic Mail and Electronic Fund Transfer (EFT), streamline business process, reduces paperwork and increase automation. The course will enable the students to understand e-commerce, its applications, the processes and the security issues.

DETAILED CONTENTS

1. Electronic Commerce Framework

Defining electronic commerce; technology of digital convergence; convergence of content and transmission types of electronic commerce – inter-organizational E-commerce, EDI over WAN, Extra nets, Electronic Fund Transfer, e-mail, Fax, Intra-organizational e-mail, Customer to Business e-mail, (B2B, B2C, C2C)

Components of E- commerce

- Institutions- Government, Merchants, Manufacturers, Suppliers, consumers, banks, financial institutions
- Processes-Marketing, Sales, Payments, Fulfillment, Support
- Networks- Corporate, Internet, Commercial

2. Architectural Frame Work of E-Commerce

- Web architecture – web browser, HTTP, TCP/IP, Web server, HTML, CGI Scripts;
- Standards – EDIFACT, EDI

3. Security Issues

Firewalls and proxy application gateways, Secure Electronic Transaction (SET), public and private key encryption, digital signatures and digital certificates, Secure Socket Layer (SSL)

4. Electronic Payment Systems

Digital cash, electronic signatures, Debit cards at Point of Sale (POS), Smart Cards, Online Credit Card based Systems, Electronic Fund Transfer (EFT), Payment gateways

5. Electronic Commerce Applications

E-Commerce Banking, Online shopping, Business Models and Revenue Models, On-line publishing, E-commerce in retailing industry, Digital Copyrights, Electronic Data Interchange, Electronic Fund Transfer, Electronic Bulletin Boards, Electronic Catalogue

6. Implementation of E-commerce

Visit most popular sites (as amazon, novle.com, indiamarket.com, Glidemart.com, E Greetings.com, Indian saway.com, himline.com and other latest sites
Developing E-commerce Enabled Applications- getting an internet, merchant bank account, web hosting, obtaining digital certificate, finding a provider of online transactions, creation of purchasing a shopping cart software

7. Legal and Social Issues

8. Tools for e-commerce: Cold fusion, e-shop etc.

9. E-Governance, issues, latest scenario of e-commerce in India, resources required for implementing an E-Governance project, guidelines etc.

LIST OF PRACTICAL

1. Visit most popular e-commerce sites on the internet and comment on their design related issues
2. Create a site which enables the acceptance of credit card
3. Create a site that includes shopping card to shop on any e-shop
4. List down the security level of various sites their strengths and limitations
5. How you can integrate an e-commerce site with other sites to make a distributed network

INSTRUCTIONAL STRATEGY

The teacher should take the help of inter-net and latest trends to teach this subject effectively. Every topic should be completed with suitable examples and case studies

RECOMMENDED BOOKS

1. Electronic Commerce – A Manager’s Guide by Ravi Kalakota and Andrew B. Whinston; Addison Wesley (Singapore) Pvt Ltd, New Delhi
2. “E-Business – Roadmap for Success” by Ravi Kalakota and Maxia Robinson; Addison Wesley (Singapore) Pvt Ltd, New Delhi
3. E-Business (R) Evolution by Amor; Addison Wesley (Singapore) Pvt Ltd, New Delhi
4. Ontiers of Electronic Commerce by Ravi Kalakota and Andrew B. Whinston; Addison Wesley (Singapore) Pvt Ltd, New Delhi
5. E-Business with Net Commerce (with CD) by Shurety; Addison Wesley (Singapore) Pvt Ltd, New Delhi