GUJARAT UNIVERSITY
K. S. SCHOOL OF BUSINESS MANAGEMENT
M.Sc. IN COMPUTER APPLICATIONS AND INFORMATION TECHNOLOGY
[Five Years' (Full-time) Integrated Degree Course]

Sixth Semester M.Sc. (CA & IT)
KS_C_CC-365 E-commerce and E-governance

3 credit course

Objective:

The subject provides the knowledge of E-commerce, the process of purchasing marketing and payment, brief knowledge of various models of E-governance

UNIT I: **(20%)**

- **Chapter 1: Introduction to Electronic Commerce.**
  1. Introduction
  2. Electronic Commerce:- Electronic Business, Categories of E – Commerce, Development and Growth of E - Commerce
  3. Business Models, revenue Models and business Process:- Merchandising, Advantages and Disadvantages of E – Commerce
  4. Economic forces and E – Commerce: Transaction cost, Markets and Hierarchies
  5. Identifying E - Commerce opportunities:- Strategic unit value chains, Industry value chain.
  6. International Nature of e-commerce. (Issues).
- **Chapter 6: Business to business strategies**
  1. Purchasing, Logistics and Support Activities:- Purchasing activities, direct vs indirect materials purchasing, logistics activities and support activities, Network Models of Economic Organization
  2. EDI
  3. Supply Chain Management using internet technologies

UNIT II: **(20%)**

- **Chapter 5: Marketing on the web**
  1. Communicating with different market segments
  2. Creating and Maintaining Brands on the web:- elements of branding, emotional vs rational branding, brand leveraging strategies, brand consolidation strategies, cost of branding, affiliate marketing, viral marketing
  3. Search Engine
- **Chapter 4: Revenue Models**
  1. Revenue models:- web catalog revenue model, digital content revenue model, advertising supported revenue model, advertising subscription mixed revenue model, fee for transaction revenue model, fee fee service revenue model
  2. Revenue models in transition

- **Chapter 11: Payment System for E-commerce**
  1. Online Payment Basics
  2. Payment Cards:- Advantages, Disadvantages, Acceptance and Processing
  3. Electronic Cash:- Micro payments and Small Payments, Privacy & Security, Holding cash, Advantages & Disadvantages, Working, Security, E-cash Systems
  4. Electronic Wallets
  5. Stored value cards
  6. Internet Technologies and Banking Industry:- cheque processing, Phishing attacks, Organized crime and identity theft

UNIT III: (20%)
- **Chapter 10: E - Commerce security**
  1. Overview of Online Security issues:- Managing Risk, Computer Security Classification, Security Policy and Integrated Security
  2. Security for Client Computer:- cookies, web bugs, active content, java applets, java scripts, active X controls, graphics and plug-ins, viruses, worms and anti virus software, Digital Certificates, Steganography, Physical security for clients.
  3. Communication channel security:- Secrecy threats, integrity threats, necessity threats, threats to physical security of internet communication channels, threats to wireless networks, Encryption solutions, Ensuring Transaction Integrity with Hash Function and Digital Signatures, Guaranteeing Transaction Delivery.
  4. Security for server computers:- Web server threats, database threats, other programming threats, threats to physical security of web servers, access control and authentication, Firewalls,
  5. Organizations that promote computer security:- CERT., other organizations, computer forensics and ethical hacking

UNIT IV: (20%)
- **Chapter 1: What is e-governance?**
  1. introduction
  2. issues in e-governance
  3. evolution
- **Chapter 2: E-governance Models**
  1. Models of digital governance:- Broadcasting/ Wider Dissemination model, Critical flow model, Comparative analysis model, Mobilization lobbying model, Interactive Service model/ Government to citizen to government model
  2. Evolution in e-governance and maturity models:- five maturity levels
  3. Characteristics of maturity levels

UNIT V: (20%)
- **Chapter 3: E-governance Infrastructure, stages in evolution and strategies for success**

1. E-readiness:- Data systems infrastructure, legal infrastructural preparedness, institutional infrastructural preparedness, Human infrastructural preparedness, Technological infrastructural preparedness
2. Evolutionary stages in e- governance
- **Chapter 4 : Applications of data warehousing and data mining in government**
  1. National data warehouses: - Census data, prices of essential commodities
  2. Other areas for data warehousing and data mining:- Agriculture, rural development, health, planning, education, commerce and trade and other sectors

Recommended Lecture Scheme: Approximately 45 hours of classroom teaching,

Recommended Practical Scheme: Not Applicable

Assignment: One assignment every month.

Text Books:
1. E-Commerce : Strategy, technology and implantation Cengage Learning
   By Gary P. Schneider
2. E-Governance, Concepts and case studies
   By C.S.R. Prabhu, PHI

Chapter -wise coverage of syllabus from Text book:
   For Unit I of this syllabus
      Text Book #1: **chapter 1 and 6**
   For Unit 2 of this syllabus
      Text Book #1: **chapter 5, 4, and 11**
   For Unit 3 of this syllabus
      Text Book #1: **chapter 10**
   For Unit 4 of this syllabus
      Text Book #2: **chapter 1 and 2**
   For Unit 5 of this syllabus
      Text Book #2: **chapter 3 and 4**