Department of Computer Science

Generic/ Other Elective Course (GE/OE)-I
(Code:)

E-COMMERCE

Credits: 2 (2 Th)　　　　No. of Lectures: 30　　　　No. of Practical: Nil

Course Description: This course introduces information systems for business and management and essentials of e-Commerce.

Learning Objectives:
- It is designed to familiarize students with organizational and managerial foundations of systems.
- The technical foundation for understanding information systems.

Course Learning Outcomes:
After Completion of the subject student should able to:
- Understand the basic concepts and technologies used in the field of management information systems;
- Have the knowledge of the different types of management information systems;
- Understand the processes of developing and implementing information systems;
- Be aware of the ethical, social, and security issues of information systems;

UNIT - I

Introduction to e-Commerce, Scope of electronic commerce, definition, e-Commerce and Trade Cycle, e- Markets, Internet e-Commerce in perspective. Value chain, Supply chain, Porters value chain model, Inter organizational value chains.

UNIT - II

Business strategy in electronic age: Competitive advantages, Strategy, Porters model, First Movers advantages, Advantages using e-Commerce. Introduction to business strategy, Strategic implications of IT, Technology,e-Commerce implementation, e-Commerce evaluation.

Business to Business e-Commerce: Inter organizational transactions, The credit transaction trade cycle, A variety of transaction,Electronics Market, Usage of e-Market, Advantages and disadvantages of e-Market, Future of e-Market, EDI.

UNIT - III

Business to Consumer Electronic Commerce: Consumer trade transaction, Internet e-Commerce, e-Shop, Other e-Commerce technologies, Advantages and disadvantages of consumer e-Commerce. Elements of e-Commerce: elements, e-Visibility, e-Shop, Online payments, Internet e-Commerce security.

Reference Books

1. Commerce, Strategy, Technologies and Applications   By: David Whiteley Tata McGraw-Hill Edition.

Department of Computer Science

Generic/Other Elective Course (GE/OE)-III
(Code: GE)

Introduction to Cyber Security

Credits: 2 (2 Th)   No. of Lectures: 30   No. of Practical: Nil

Course Description:

This course imparts the basics of the cyber security to all students.

Learning Objectives:
This course is designed to satisfy the following objectives:

- To learn basic computer concepts of cyberspace.
- To impart the knowledge of concepts associated with the cyber security.
- To acquaint and make them familiar with recent trends in the cyber world.

Course Learning Outcomes:
After successful completion of thecourse student will be able to:

- Understand cyber world concepts.
- Get acquainted with best practices to be followed in the virtual world.
- Learn to safely explore the cyberspace and exchange information through secured techniques.

Unit – I
Introduction, Security Threats and Risks: Confidentiality, Integrity, and Availability, Security and Information Privacy, Threats and Breaches, Threat Types, Phishing, Social Engineering, and Other Attacks

Unit – II
Security Best Practices: Password Management Techniques, Authentication and SSO, Security Threats: Access Control, Authorization, and Authentication, Hardening Devices, Security Threats: Validation and Device Usage, Security Threats: Encryption Concepts, Managing Email and Spam, Firewalls

Unit – III
Safe Browsing Practices: Application Ecosystem Security, Public Browsing Risks, Plug-ins, Extensions, and Toolbars, Safe Browsing Techniques, Virtual Private Networks

References:

1. Information Systems Security Management - Nina S. Godbole (Wiley India Pvt. Ltd.)
2. Network Security Essentials: Applications and Standards - W. Stallings (Pearson Education)
3. Data Communication and Networking - Forouzan (McGraw Hill)
4. Cryptography and Network Security: Principles and Practice - W. Stallings
5. Principles of Information Security - Michael E Whitman and Herbert J. Mattord (Vikas Publishing House, New Delhi, 2003).