Objectives of the course:

- To understand Technical aspect of E-commerce and E-Business
- To describe the process of E-commerce and E-business
- To understand Infrastructure design issues of E-commerce

Contents of the Course

Part 1: E-commerce

1. **Introduction**: Electronic commerce and Physical Commerce, different type of e-commerce, some e-commerce scenario, Advantages of e-commerce
2. **Basic technologies of E-commerce**: Client side Programming, Server Side Programming, Database connectivity, session tracking techniques.
4. **Internet Payment System**: Characteristics of payment system, SET Protocol for credit card payment, E-cash, E-check, Micropayment system
5. **E-commerce strategies**: Strategies for marketing, Sales and Promotions, Strategies for Purchasing and support activities, Strategies for Web Auctions, Virtual Communities, and web portals
7. **E-business strategies**: Strategic positioning, Levels of e-business strategies, Strategic planning process, Strategic alignment, the consequences of e-Business, Success factors for implementation of e-business strategies. Business models, Business process and collaborations
8. **Integration of Application**: Approaches to Middleware, RPC and RMI, Enterprise Application Integration, e-business Integration, loosely Coupled e-Business solutions for integration, Service Oriented Architecture, EAI and web Services, WS-security.
9. **E-commerce Infrastructure** Cluster of Servers, Virtualization Techniques, Cloud computing, Server consolidation using cloud, Introduction to Hadoop, HDFS, Google Apps engine
TEXT BOOKS:

1. E-Commerce Fundamentals and application (Henry Chan) Wiley publication
2. Electronics Commerce (Gary Schneider) Thomson Course technology
3. E-Business Organizational and technical foundation (Michael P) Wiley Publication

REFERENCES:

1. E- Commerce Strategies, Technology and applications (David) Tata McGrawHill
2. Introduction to E-commerce (jeffrey) Tata- Mcgrawhill
3. E-Business and Commerce- Strategic Thinking and Practice (Brahm) biztantra
4. Using Google Aps engine (Severance) O’reilly
5. Hadoop : The Definitive Guide (White) O’reilly

Term Work

Term work shall consist of at least 6 assignments/programming assignments and one written test.

Marks

1. Laboratory work (Experiments and Journal)                  15 Marks
2. Test (at least one)                                        10 Marks

The final certification and acceptance of TW ensures the satisfactory performance of laboratory Work and Minimum Passing in the term work.

Suggested List of Experiments

Exp 1: All experiments should be part of final e-commerce portal development

1. Home page design
2. Form validation (Ajax enabled)
3. Catalog design and Search techniques (Web mining, and Ajax enabled)
4. Access control mechanism (session management)
5. Creating Web Site to integrate at least five REST web Services (Web Mashups)
6. Server side using Web Services

Ex 2: Creatin Hadoo clusters on Ubuntu