**MIS AND E-BUSINESS**

UNIT-1: INTRODUCTION TO E-COMMERCE

1. **Definitions and concept**
2. **Defining E-business**
3. **Pure versus partial EC**
4. **EC Framework**
5. **Classification of EC**
6. **Benefits of E-commerce**
7. **Electronic markets**
8. **Role of internet and Web in E-Commerce**
9. **The limitations and barriers of EC**
10. **Social network and social network services**
11. **M-Commerce**
    1. **Concept**
    2. **Scope**
    3. **Attributes**
    4. **Benefits**
12. **Location-Based I-commerce**
13. **I-commerce infrastructure**
14. **Location-based services and application**

UNIT-2: THE NETWORK INFRASTRUCTURE FOR E-COMMERCE

1. **The network infrastructure for E-commerce**
   1. **Introduction to information superhighway(I-Way)**
   2. **Components of the I-Way**
   3. **Internet as a network infrastructure**
2. **Wireless Application Protocol**
   1. **Wireless application protocol(WAP)**
   2. **Architecture of WAP**
   3. **Working of WAP**
3. **Wireless technologies**
   1. **ADSL**
   2. **WiMAX**
   3. **WLAN**
   4. **WMAN**
   5. **Wi-Fi**
   6. **UMTS(3G)**
   7. **LTE(4G)**
   8. **5GNR**
   9. **Security Issues related to wireless communications**

UNIT-3: INTRODUCTION TO MANAGEMENT INFORMATION SYSTEM

1. **Data**
2. **Information**
3. **Computer based information system(CBIS)**
4. **Information system resources**
5. **Management information system**
6. **Transaction processing(TPS) system**
7. **Decision support system (DSS)**
8. **Executive information system(EIS)**
9. **SCM**
10. **CRMS and international systems**
    1. **Introduction**
    2. **Supply chain management systems**
    3. **Customer relationships management system**
    4. **Enterprise systems and challenges of enterprise systems implementations**
       1. **Managing the implementation**
    5. **International information systems-outsourcing and off-shoring**

UNIT-4: E-COMMERCE SECURITY AND FRAUD ISSUES AND PROTECTIONS

1. **Basic EC security terminology**
2. **The threats**
3. **Attacks and Attackers**
4. **EC security requirements**
   1. **Confidentiality**
   2. **Integrity and availability**
   3. **Authentication**
   4. **Authorization and nonrepudiation**
5. **Technical ----- attack**
   1. **Viruses**
   2. **Worms and Trojan horses**
   3. **Heartbleed**
   4. **Distributed --------**
   5. **Crypblocker**
   6. **Page hijacking**
   7. **Botnets**
   8. **Malvertising**
   9. **Rasomware**
   10. **Sniffing**
6. **Non-Technical malware attack**
   1. **Social phishing**
   2. **Pharming**
   3. **Identity theft and identity fraud**
   4. **Spam attacks**
7. **EC defense strategy**
   1. **Access control**
      1. **Authorization**
      2. **Authentication**
      3. **Biometric systems**
   2. **Encryption and PKI**
      1. **Symmetric key encryption**
      2. **Asymmetric key encryption**
   3. **Certificate Authority(CA)**
   4. **Secure socket layer(SSL)**
8. **Securing e-commerce networks**
   1. **Firewalls**
   2. **Virtual private networks**
   3. **Intrusion detection systems(IDS)**
   4. **Intrusion prevention system(IPS)**

UNIT-5: E-PAYMENT SYSTEMS

1. **Online payment cards**
   1. **Credit cards**
   2. **Charge cards**
   3. **Debit cards**
   4. **Smart cards**
2. **Processing cards in online**
3. **Credit card payment procedure**
4. **E-micropayments**
5. **E-checking and its processing in online**
6. **Automated clearing house(ACH) network**
7. **Mobile payments(Digital wallet)**
8. **Mobile payment participants and issues**
9. **International payments**
10. **Emerging EC payment systems and issues**
11. **Crypto currency**
12. **Virtual currency**
13. **A case study of emerging trends in online payment system in Nepal**

UNIT-6: LAUNCHING A SUCCESSFUL EC-WEBSITE

1. **Planning online businesses**
   1. **Business plan**
   2. **The cost benefit**
   3. **Risk elements of a business case**
   4. **Funding a new online business**
   5. **EC model selection**
2. **The process of building a website**
3. **Basic hierarchical website structure**
4. **Website hosting and obtaining a domain name**
   1. **cPanel management**
   2. **upload EC site to the web server**
5. **web content creating and management**
   1. **Web content**
   2. **Categories and types of content**
   3. **Content management and maintenance**
   4. **Catalog content and its management**
6. **Website design criteria**
7. **Site map and navigation**
8. **Web page layout grid**
9. **Color and graphics**
10. **Website usability**
11. **Performance**
12. **Website promotion**
13. **Implementation of payments system**
14. **Website promotion**
15. **Search engine optimization(SEO)**