## PETX5412 MANAGEMENT INFORMATION SYSTEM

Module – I (12 hours)

Overview: Definition of MIS, Data processing and MIS, Characteristics of MIS, Need / importance of MIS in organization, Limitations of MIS; MIS and other disciplines

Data and Information; Characteristics of Information; Types of Information – Operational, Tactical and Strategic information; Managers as Information Processors;

System Approach: MIS as a system, Sub-systems of MIS – Activity sub-systems, Functional sub-system

Decision Making: Decision-making under certainty, risk and uncertainty; Phases of Decision-making Process; Decision Models - Classical Economic Model, Administrative Model; Organizational Decision-making

Planning for development of MIS: Feasibility Analysis – Technical, Economic, Motivational, Schedule and Operational Feasibility; MIS development as a project;

Module – II (12 hours)

Overview of System Life Cycle Models – Waterfall model, Prototyping model and Spiral model

System Analysis and Design (SAD): Purpose, Requirement engineering, Typical content of System Requirement Specification (SRS), System Design – high level design and low level design, Characteristics of good design – coupling and cohesion

Overview of tools used in SAD – Context diagram, Data Flow Diagram (DFD), Data Dictionary, ER diagram, Structure charts, HIPO documentation, Decision Table, Decision Tree, Pseudocode

Module – III (12 hours)

MIS in Organization: MIS in Marketing; Manufacturing; HRM; Accounting and Finance, Enterprise Resource Planning (ERP) System.

Business Intelligence (BI): Role of BI in marketing, finance, human resource, and manufacturing; Overview of DSS, Data Mining and Data Warehouse

Implementation of MIS: Critical Success Factor

Information System Security, Privacy, Social and Ethical issues

## **Books:**

- 1. Management Information Systems, M Jaiswal & M Mital, Oxford Univ. Press
- 2. Information Systems for Modern Management, Murdick, Ross & Claggett, PHI
- 3. Management Information System, Launden & Launden, Pearson
- 4. Management Information System, James O Brian, TMH
- 5. Management Information Systems, A K Gupta, Sultan Chand & Sons
- 6. Management Information System, Jawadekar, McGraw Hill