# **Management Information Systems (MIS)**

The comprehensive exam is composed of mcq's and short questions covering the following topics:

### 1. System Analysis and Design

Tools and techniques of planning, analyzing, designing, implementing and maintaining Information system.i.e

Systems Concept; Characteristics of a System; Elements of System; Types of Systems; Decision Support System; System Development Life Cycle, Investigation, Analysis, Design, Implementation, Post Implementation Review and Maintenance

#### **Suggested Reading:**

System Analysis and Design (9th Edition) by Kenneth E. Kendall and Julie E Kendall

### 2. <u>Database Management System</u>

Applications of systems designed to manage the data resources of organizations, handson implementation of a database in corporate environment. i.e

Introduction to Database; Organization of Database; Components of Database
Management Systems; Data Models; Entity-Relationship Model; Network Data
Model; Hierarchy Data Model; Relational Data Model; Advantages of
DBMS.Relational Database Design: Integrity Constraints; Normalization; Physical
Database Design

#### **Suggested Reading:**

Database Systems: A Practical Approach to Design Implementation, and Management by Thomas Connolly and Carolyn Begg. Addison Wesley

# 3. <u>Data Communication & Network</u>

It includes a detailed discussion of the different Network Models.i.e Fundamentals of Communication System; Communication Links, Communication System Formats; Character Codes, Digital Data Rates; Asynchronous and Synchronous Data, LAN topologies: Workstation; Server; Cables; Types of Ethernet;

Broadband and base-band; Optical Fibers; Network Interface Card

#### **Suggested Reading:**

Data Computer Communication by William Stallings (10th Ed.)

### 4. E-Commerce

Current business models, strategies and opportunities in electronic publishing, communication, distribution, collaboration, and online payment options; Business to Business E-commerce; Business to Customer E-commerce, Explain what is Ecommerce, How E commerce works on the internet

#### **Suggested Reading:**

E-COMMERCE by Turban

### 5. Enterprise Resource Planning systems

Basic concepts of ERP systems, knowledge of typical ERP systems, and the advantages and limitations of implementing such systems

### **Suggested Reading:**

Concepts in Enterprise Resource Planning by Monk, E. F., Wagner, B. J.

# 6. Business Information Technology & Information

# **System Management**

Topics covered include information technology planning and strategy, trends in computer hardware and systems software, telecommunications and network management, control and management of information resources, distributed and client-server technologies, and data representation and visualization

#### **Suggested Reading:**

James A. O'Brien, George M. Marak, Management Information System, Ninth Edition, McGraw-Hill, 2011

The comprehensive exam is designed to integrate and focus knowledge gained from the above courses and professional experience/reading. Questions asked reflect broad educational experiences and encourages the student to integrate knowledge. Examination questions are not course-specific or instructor specific.