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. **Database Management System**
   Applications of systems designed to manage the data resources of organizations, hands-on 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. **Data Communication & Network**
   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:**

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:**
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 instructorspecific.