

# **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **MASTER OF COMPUTER APPLICATIONS (MCA)**

### **Semester: IV**

**Subject Name: Management Information Systems (MIS)**

**Subject Code: 2640004**

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#### **Learning Objectives:**

Information Technology has made decisive inroads to all walks of life and is being extensively used in decision making, ease of operations, communication, record keeping and for obtaining higher productivity from the system to which it is put to use. The main objective of this course is to emphasize on the application of information to business management. It also aims at providing a conceptual insight on the functions of management, importance of information, information needs at different levels, systems approach to management of information, process of development and implementation of MIS and thus improving the design and use of information systems.

**Prerequisites: NIL**

#### **Contents:**

- 1. Information and Management (8 Lect.)**  
Definition of Information, Types of Information, Sources, Values and Control of Information, Implications of Information in Business & MIS Need for Information Systems, Examples of Information Systems, Impact of IT on organizations and society
- 2. Basics of MIS (20 Lect.)**  
Decision-making, Process and Modeling, MIS and Decision-Making, Classification of Information, Methods of Data and Information Collection, Model of Human as Information Processor, Knowledge & Knowledge Management Systems, Business Intelligence, System Concept & Control, General Model of MIS, Development Process of MIS, Implementation of MIS, Decision Support System, Group Decision Support System, Knowledge Based Expert Systems, Benefits of DSS
- 3. MIS in Functional Areas of Manufacturing & Service Sectors (10 Lect.)**  
Application of MIS in various Manufacturing Sectors as well as Non-Manufacturing (Service) Sectors
- 4. New Concepts in MIS (10 Lect.)**  
e-Business, Information Security, Computer Crime & Cyberterrorism, Computer Forensics, Information Life Cycle Management

#### **Text Books:**

1. V. Rajaraman, "Analysis and Design of Information Systems", PHI Publication, 2<sup>nd</sup> Edition (2006)
2. Waman S. Jawadekar, "Management Information Systems – Text & Cases", Tata McGrawHill Publication, 4<sup>th</sup> Edition (2009)
3. Ken Laudon, Jane Laudon, Rajanish Dass, "Management Information Systems – Managing the Digital Firm", Pearson Education, 11<sup>th</sup> Edition (2010)

**Other Reference Books:**

1. Robert G. Murdick, Joel E. Ross, James R. Claggett, “Information Systems for Modern Management”, PHI Publication, 3<sup>rd</sup> Edition (2005)
2. Stephen Haag, Maeve Cummings, Amy Philips, “Management Information Systems – For the Information Age”, McGraw-Hill Publication, 6<sup>th</sup> Edition (2010)
3. Leonard Jessup, Joseph Valacich, “Information Systems Today – Managing in the Digital World”, PHI Publication, 3<sup>rd</sup> Edition (2008)
4. Sanjay Mohapatra, “Cases in Management Information Systems”, PHI Publication, (2009)
5. Lisa Miller, “MIS Cases – Decision Making with Application Software”, Pearson Education, 3<sup>rd</sup> Edition (2007)
6. Steven Alter, “Information Systems – The Foundation of E-business”, Pearson Education, 4<sup>th</sup> Edition (2002)

**Chapter wise Coverage from the Text Books:**

<b>Book # 1 :</b>	Chapter 1 & 2
<b>Book # 2 :</b>	Chapter 5, 6, 7, 8.1 – 8.6, 9, 12, 13, 14
<b>Book # 3 :</b>	Chapter 8

**Case Studies in MIS:**

Case Study Method and Discussion of Cases in MIS can be incorporated as part of CEC.

**Accomplishments of the student after completing the course:**

After completion of the course the student will be able to understand and appreciate the basic concepts of MIS, importance of MIS for an organization and will be able to contribute effectively in the development and implementation of MIS in different types of organizations.