

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Master in Computer Application (Integrated MCA)**  
**Year III-(Semester-VI) (w.e.f. December, 2015)**

**Subject Name: Management Information Systems (MIS)**  
**Subject Code: 4460601**

**1. Learning objectives:**

- 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
- Provide understanding of the design and use of information systems.

**2. Prerequisites: NIL**

**3. Contents:**

Unit No.	Course Content	No of Lectures
<b>I</b>	<b>Introduction to Information and Management</b>  Information, Types and Sources of Information, Qualities of Information, Need of computer based information systems, Management and Information requirements	[04]
<b>II</b>	<b>Basics of MIS</b>  MIS, Classification of Information, Model of Human as Information Processor, Decision-making, Decision Making Process, MIS and Decision Making, Decision analysis by analytical Modelling	[06]
<b>III</b>	<b>Information, Knowledge and BI :</b>  Methods of Data and Information Collection, Value of Information. General Model of MIS, Development Process of MIS, Implementation of MIS  Knowledge & Knowledge Management Systems, Knowledge Based Expert Systems, Business Intelligence, OLAP  Types and classes of System, Decision Support System, Group Decision Support System, Benefits of DSS, Executive Information Systems, Expert Systems, System	[12]

	Concept & Control	
IV	<b>Application of MIS to eBusiness:</b> eBusiness and Models of eBusiness, mCommerce, Data in Data warehouse, Data warehouse and MIS	[06]
V	<b>Information Security</b> Information Security, Impact of IT on Privacy, ethics, Intellectual Property, Copyrights and Patents, Impact of IT on workplace and Life Technical Solutions for privacy protection: Encryption, Firewalls, Antivirus	[06]
VI	<b>Case Study</b> <b>Identification of MIS Reports, Design Report Layout:</b> MIS for Human Resources, Sales, Marketing, Production, Finance and Service Sector	[14]

#### 4. Reference Book(s):

1. V. Rajaraman, "Analysis and Design of Information Systems", PHI Publication, 2nd Edition (2006)
2. Waman S. Jawadekar, "Management Information Systems – Text & Cases", Tata McGrawHill Publication, 4th Edition (2009)

#### 5. Suggested Additional Reading:

- 1) Ken Laudon, Jane Laudon, RajanishDass, "Management Information Systems – Managing the Digital Firm", Pearson Education, 11th Edition (2010)
- 2) Robert G. Murdick, Joel E. Ross, James R. Claggett, "Information Systems for Modern Management", PHI Publication, 3rd Edition (2005)
- 3) Stephen Haag, Maeve Cummings, Amy Philips, "Management Information Systems – For the Information Age", McGraw-Hill Publication, 6th Edition (2010)
- 4) Leonard Jessup, Joseph Valacich, "Information Systems Today – Managing in the Digital World", PHI Publication, 3rd Edition (2008)
- 5) Sanjay Mohapatra, "Cases in Management Information Systems", PHI Publication, (2009)
- 6) Lisa Miller, "MIS Cases – Decision Making with Application Software", Pearson Education, 3rd Edition (2007)
- 7) Steven Alter, "Information Systems – The Foundation of E-business", Pearson Education, 4th Edition (2002)

#### 6. Chapter wise Coverage from Main Reference Book(s):

Unit	Book	Chapter
1	1	Chapter 1 ( Except 1.3) ( Pages 15)

2	2	Chapter 6,7,
3	2	Chapter 7, 8.1, 8.2,8.3, 8.5,14
4	2	Chapter 20.1, 20.2, 19.2,19.9
5	2	Chapter 5
6	2	Chapter 12 (*), 13 (*)

Note: (\*) We suggest to cover more case studies.

## 7. Case Studies in MIS:

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

- Identification of Strategic, Tactical and Operational Information of Hospital Management system, State Road Transportation System
- Data warehouse Building for Sales, Finance etc.
- Expert System Design for Credit Card Management System
- BI for Mutual Funds
- MIS Reports design for Sales, Finance, and Human Resource Management System etc.
- Security Management of Information Technology

## 8. 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.