GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Integrated Master of Computer Applications, 6th Semester
Subject Name: Management Information System
Subject Code: 2668601

1. **Learning Objectives:**
   - Understand the nature of management information systems and their applications in business
   - Learn the core activities in the systems development process

2. **Prerequisites:** No specific

3. **Contents:**

Unit	Chapter Details	Weightage Percentage
Unit I	**Introduction to Management Information System (MIS):** Management Information System Concepts, Definition, Role of Management Information Systems, Impact of MIS, MIS and user, Management as a control system, MIS a support to the Management, Management Effectiveness and MIS, Organization as a System, Organization effectiveness, MIS for a Digital Firm **Decision Making:** Decision Making Concepts, Decision Making Process, Decision Analysis by analytical modelling, Behavioral concepts in Decision Making, Organizational Decision Making, MIS and Decision Making	15%
Unit II	**Basics of Information, Knowledge and BI** **Introduction to Information:** Information Concept, Information – A quality product, classification of information, Methods of data and Information collection, Value of the information, General model of a human as an information processor, Summary information concepts and their implications Knowledge & Knowledge Management Systems, Business Intelligence, MIS, Information and the Knowledge System concepts, Systems control, Types of systems, classes of System Decision Support System, Group Decision Support System, Benefits of DSS, DSS application in E-enterprise, Knowledge Management Systems, Knowledge Based Expert Systems (KBES), MIS and benefits of DSS	20%
Unit III	**Development Process of MIS** Development of Long Range Plans of MIS, Ascertaining the class of Information, Determining the Information Requirement, Development and Implementation of MIS, Management of Information Quality in the MIS, Organization for Development of MIS, MIS: Development Process Model	20%-

GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Integrated Master of Computer Applications, 6th Semester
Subject Name: Management Information System
Subject Code: 2668601

With effective from academic year 2018-19

Unit IV	**Control, Audit and Security of Information Systems**	10%
	Control in Information Systems, Audit of Information Systems, Testing of Information Systems, Security of Information Systems	
Unit V	**Case Study**	25%
	Identification of MIS Reports, Design Report Layout: MIS for Human Resources, Sales, Marketing, Production, Finance and Service Sector	
Unit VI (*)	**Business Reporting, Visual Analytics:**	4.
	Definition, concepts Different types of charts and graphs Emergence of data visualization and visual analytics	
	Tool: Tableau (tableau.com)	

(*) To be covered under workshop mode and no questions to be asked in theory exam.

4. **Text Book:**
   1) Waman S. Jawadekar, "Management Information Systems A Digital Perspective – Text & Cases", Tata McGrawHill Publication, 4th Edition (2009)
   2) V. Rajaraman, "Analysis and Design of Information Systems", PHI Publication, 3rd Edition
   3) Ramesh Sharda, Dursun Delen, Efraim Turban , Business Intelligence: A Managerial Perspective on Analytics, 3rd Edition, Peason

5. **Reference Books:**
   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 No.	Text Books	Topics/Subtopics
I	Book 1	Chapter 1, 6
II	Book 1	Chapter 7, 8.1, 8.2,8.3,8.5, 14
III	Book 1	Chapter 9

GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Integrated Master of Computer Applications, 6th Semester
Subject Name: Management Information System
Subject Code: 2668601

With effective from academic year 2018-19

IV	Book 2	Chapter 16
V	Book 1	Chapter 12, 13
VI	Book 3	Chapter 3

Online learning Course: Management Information System: www. nptel.ac.in

7. **Case Study Method and Discussion of Cases in MIS can be incorporated as part of CEC.**
   a. Identification of Strategic, Tactical and Operational Information of Hospital Management system, State Road Transportation System
   b. Expert System Design for Credit Card Management System
   c. BI for Mutual Funds
   d. MIS Reports design for Sales, Finance, and Human Resource Management System etc.
   e. 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.