Government PG College, Ambala Cantt

Course File(Session 2023-24)

Name of Professor: Ashok

Class: BCA-II/4th Semester/ SECTION: A and B

Subject code and Name: BCA – 246 / MANAGEMENT INFORMATION SYSTEM

SYLLABUS

Maximum Marks: 100   **External: 80**

Minimum Pass Marks: 35   **Internal: 20**

Time: 3 hours

Note: Examiner will be required to set Nine Questions in all. First Question will be compulsory, consisting of objective type/short-answer type questions covering the entire syllabus. In addition to that eight more questions will be set, two questions from each Unit. A candidate will be required to answer five questions in all, selecting one question from each unit in addition to compulsory Question No. 1. All questions will carry equal marks.

UNIT – I

Introduction to system and Basic System Concepts, Types of Systems, The Systems Approach, Information System: Definition & Characteristics, Types of information, Role of Information in Decision- Making, Sub-Systems of an Information system: EDP and MIS management levels, EDP/MIS/DSS.

UNIT –II

An overview of Management Information System: Definition & Characteristics, Components of MIS, Frame Work for Understanding MIS: Information requirements & Levels of Management, Simon's Model of decision-Making, Structured Vs Un-structured decisions, Formal vs. Informal systems.

UNIT – III

Developing Information Systems: Analysis & Design of Information Systems: Implementation & Evaluation, Pitfalls in MIS Development.

UNIT – IV

Functional MIS: A Study of Personnel, Financial and production MIS, Introduction to e-business systems, ecommerce – technologies, applications, Decision support systems – support systems for planning, control and decision-making

TEXT BOOK:

1. J. Kanter, "Management/Information Systems", PHI.

2. Gordon B. Davis, M. H. Olson, "Management Information Systems – Conceptual foundations, structure and Development", McGraw Hill.

REFERENCE BOOK:

1. James A. O'Brien, "Management Information Systems", Tata McGraw-Hill.

2. James A. Senn, "Analysis & Design of Information Systems", Second edition, McGraw Hill.

3. Robert G. Murdick & Joel E. Ross & James R. Claggett, "Information Systems for Modern Management", PHI.

4. Lucas, "Analysis, Design & Implementation of Information System", McGraw Hill.

COURSE OBJECTIVES

The course objectives outlined are as follows:

- **Role of Information Technology and Decision Support Systems:** Describe how information technology and decision support systems contribute to businesses and analyze current issues within firms to solve business problems.

- **Understand Management Information Systems:** Explore and define Management Information System (MIS) and its characteristics. Identify the components of an MIS. Understand the framework for understanding MIS. Explain Simon's Model of decision-making and distinguish between structured and unstructured decisions.

- **Fundamental Principles of Computer-Based Information Systems Analysis and Design:** Introduce the foundational principles of analysing and designing computer-based information systems, fostering an understanding of the techniques and methodologies employed in this process.

- **Impact of Internet Technology on Electronic Commerce and Business:** Enable students to assess the influence of the Internet and Internet technologies on electronic commerce and business operations. Understand the specific risks and vulnerabilities associated with computer systems in this context.

- **Use Management Information Systems in different Functional Areas:** Provide students with theoretical models used in examining functional MIS in the areas of personnel, financial, and production management.

These objectives collectively aim to equip students with a comprehensive understanding of how information technology, decision support systems, expert systems, internet technology, and database management systems intersect with business operations. By covering these topics, students will be better prepared to analyze, design, and utilize technological solutions to address contemporary business challenges and enhance organizational competitiveness.

COURSE OUTCOMES

After the successful completion of the course, students will be able to:

- Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision-making.
- Understand the fundamental concepts of systems and their types.
- Apply the systems approach to analyze and solve complex problems.
- Define an information system and recognize its characteristics.
- Identify different types of information and their role in decision-making process.
- Describe the sub-systems of an information system, including EDP and MIS, and their management levels.
- Differentiate between EDP, MIS, and DSS in terms of their functions and applications.
- Analyse and synthesize business information and systems to facilitate the evaluation of strategic alternatives.
- Effectively communicate strategic alternatives to facilitate decision-making.
- Articulate the fundamental principles of information systems analysis and design.
- Demonstrate the skills necessary to conduct a requirements determination study.
- Analyse how information system impacts a firm.
- Interpret how to use information systems to solve business problems.
- Explore decision support systems and their role in planning, control, and decision-making processes.

Lesson Plan

Week No	Scheduled Dates	Topics to be covered
1	**1-6 January**	Introduction to system and Basic System Concepts, Types of Systems,
2	**8-13 January**	The Systems Approach, Information System: Definition & Characteristics.
3	**15-20 January**	Types of information, Role of Information in Decision- Making
4	**22-27 January**	Sub-Systems of an Information system: EDP and MIS management levels, EDP/MIS/DSS. Oral Test
5	**29-3 February**	An overview of Management Information System: Definition & Characteristics,
6	**5-10 February**	Components of MIS, Frame Work for Understanding MIS: Information requirements & Levels of Management,
7	**12-17 February**	Simon's Model of decision-Making, Structured Vs Un-structured decisions, Formal vs. Informal systems. Oral Test
8	**19-24 February**	Developing Information Systems: Analysis & Design of Information Systems
9	**26-2 March**	Systems: Implementation & Evaluation, Pitfalls in MIS Development.
10	**4-9 March**	Systems: Implementation & Evaluation, Pitfalls in MIS Development. Oral Test
11	**11-16 March**	Functional MIS: A Study of Personnel, Financial and production MIS,
12	**18-23 March**	Functional MIS: A Study of Personnel, Financial and production MIS,
13	**1-6 April**	Introduction to e-business systems, e-commerce – technologies, applications,
14	**8-13 April**	Decision support systems – support systems for planning, control and decision-making,
15	**15-20 April**	Final Test, Assignments and REVISION of Contents
16	**22-27 April**	Previous Year Question Papers Discussion