Goa University

**Programme:** B.C.A.

Course Code: CAC118 Title of the Course: Information Systems Number of Credits: 04 Effective from AY: 2021-22

|  |  |  |  |
| --- | --- | --- | --- |
| **Prerequisites** | | None | |
| **Objectives** | | This course is aimed :-  **CO1** To provide awareness and appreciation of MIS and to understand the need of MIS in organisations  **CO2** To develop an in-depth understanding of essential components comprising Management Information Systems  **CO3** To understand the role of MIS in effective decision making | |
| **Content** | | | **No. of Hours**  **(60)** |
| **1** | **Introduction to MIS**   * Definition of MIS * Importance of MIS in organizations * MIS as a tool for implementation of management process | | 04 |
| **2** | **Data and Information**   * Definition of data and Information and their sources * Distinction between data and information * Types of Information * Attributes of Information | | 04 |
| **3** | **Knowledge**   * Definition of knowledge * Differentiate between data, information and knowledge * Types of knowledge * The spiral of knowledge creation * Tools for knowledge conversion * Knowledge and Knowledge Management Systems | | 08 |
| **4** | **Decision Making**   * Decision making - concept and characteristics * Models of Decision Making * Tools for Decision Making | | 04 |
| **5** | **Types of Information Systems**   * Office Automation Systems- features, advantages and limitations * Expert System (ES) – features, advantages and limitations * Executive Support System (ESS) – features, advantages and limitations | | 12 |
| **6** | **Information Systems in Organizations**  Overview of following Information Systems:   * ERP Systems * SCM Systems * CRM Systems | | 12 |

|  |  |  |  |
| --- | --- | --- | --- |
| **7** | **Technology of Information Systems**   * Data Processing * Transaction Processing * Application Processing * Information System Processing * OLAP for analyzing information | | 08 |
| **8** | **Data Warehouse**   * Concept of Data warehouse * Difference between Database and Data warehouse * Need of Data warehouse for MIS * Architecture of Data warehouse * Query and Reporting tools namely, Data Analysis, OLAP and | | 08 |
| **Pedagogy** | | * Course delivery pattern, evaluation scheme, prerequisite shall be discussed at the beginning. * Lectures preferably to be conducted with the aid of multi-media projector, black board, group activities, charts, cases * One internal written exam would be conducted as a part of internal theory evaluation. * One assignment based on the course content may be given to the students to evaluate how learning of objectives was achieved. * One case study on MIS needs to be done. | |
| **Textbooks/ Reference Books** | | **Textbooks:**   1. Waman. S. Jawadekar, Management Information Systems, Tata McGraw-Hill Publishing Company Limited; 5th Edition 2. Kenneth J Laudon, Jane P. Laudon Management Information Systems, Pearson; 15th Edition 3. Ralph Stair, George Reynolds, Principles of Information Systems, Cengage Learning; 13th Edition 4. James A. O’ Brien, Introduction to Information System, McGraw-Hill/Irwin; 12th Edition 5. S. Sadagopan, Management Information Systems, Prentice-Hall of India Pvt.Ltd.; 2nd Edition 6. Effy Oz, Management Information Systems, Course Technology; Cengage, 3rd edition 7. Lynda AppleGate, Robert Austin & Deborah Soule, Corporate Information   Strategy and Management, McGraw-Hill Education; 8th edition | |
| **Learning Outcomes** | | On completion of the course learners will be able to :-  **LO1** Explain the role of Information Systems in organizational Management to know knowledge, its classifications; capturing, storing and utilizing it in an organization  **LO3** Describe the characteristics of decision making, decision making models and tools  **LO4** Describe the concept of Office Automation Systems, Expert System and Executive Expert System  **LO5** Compare different information systems such as ERP, SCM and CRM. | |