

MBPC3041 HOSPITAL MANAGEMENT INFORMATION SYSTEM (3-0-0)

Course Objective:

- * To understand the role and architecture of information systems in hospitals.
- * Understand Hospital / Health Information System – HIS
- * Get an overview of the software for hospitals and practice basic skills of using computers in Health Care

Module - I

Basics of Computers and Management Information System Computers and its Parts IT: Appropriateness and as focus of Organizational Change Software and Hardware Selection: Factors to be Considered, Methods of Selecting and Optimize the Selection Procedures Networking : Importance, Types, Methods of Networking, Network Planning and Management LAN Security : Protecting Health Care Information, Internal Vs. External Threats.

MIS : How to Process Information, Information and Records, Importance of Planning; Training and Educating Staff, Testing MIS - Role of IT in Office Automation -Communication Technology for Automation; Retrieval and Storage System; Integrated Office Automation; Portable Office; Future Edge of Information Technology.

Module - II

Systems Management, Software Applications and Developmental Process: System – SSAD Approach: Meaning, System Analysis, Design, Development, Testing, Implementation, Maintenance; Computer Systems Control and Auditing;

Hospital / Health Information System – HIS: Objectives, Characteristics, Elements, Categories -HIS for Various Levels of Management (Top / Middle / Operational) Integrated HIS (IHMS) Comprehensive Single Hospital MIS (CSHS), Comprehensive Multi-hospitals MIS (CMHS), Business Office Multihospital MIS (BMHS) and Special Purpose Single Hospital MIS (SSHS)

Module - III

Application of Computers in Hospitals and Health Programs. Need and Importance of IT in Health Care Centralized Vs Decentralized Integrated Online HIS Computerizing Medical Records, OPD, Ward, Admission and Discharge, OT, Clinical Laboratory, Blood Bank, Eye Bank, Clinical Quality Assurance, Pharmacy Community Outreach, Reception / Front Office, Materials Management, Financial Accounting, HRM, Training and Development, Medical Research, Library and Literature Search, Housekeeping Implementing wireless computerized patient records Complexity in computerizing Hospitals Computerizing Health Programs / Projects and widely used latest Statistical and Evaluation Software

Latest Advancement in Technology Geographical Information System (GIS): Digitizing Map, Software and Hardware Required for GIS Clinical Practices through Internet and Tele health, Electronic Medical Documentation and Smart Cards Useful Websites in Health Care Future Trends in Health Care Information Systems.

Course Outcome:

- Describe core components and functionalities of HIS, including patient registration, billing, pharmacy, lab, and electronic health records.
- Apply theoretical concepts to simulate hospital scenarios using HMIS tools.
- Strategies for HMIS adoption and upgrades tailored to various hospital sizes and types.

Text reference:

1. Karen a.Wager,Francis W.Lee,John P.Glaser,'Health care Information System-A practical approach for Health Care Management,4th edition,Wiley,2017
2. Kathleen M., INFORMATICS FOR HEALTHCARE PROFESSIONAL
3. James O'Brien, Tate McGraw Hill, MANAGEMENT INFORMATION SYSTEM
4. Peter Norton, INTRODUCTION TO COMPUTER, Tata McGraw Hill