

# IT for Health Care

B.E. Sem. VIII [INFT]

(Elective – II)

## EVALUATION SYSTEM

|                | Time   | Marks |
|----------------|--------|-------|
| Theory Exam    | 3 Hrs. | 100   |
| Practical Exam | –      | –     |
| Oral Exam      | –      | 25    |
| Term Work      | –      | 25    |

## SYLLABUS

- **Pre requisite:** Basic knowledge of IT and MIS.
  - **Objective:** The aim of this course is to make students aware of the use of information and communication technology in health care. Health IT can support patient care related activities using Health IT applications, such as desktop computer applications, cellular phones, personal digital assistants (PDAs), touch screen kiosks, and others. Examples of health IT applications are, electronic health records (EHR) electronic medical records (EMR), personal health records (PHR), telemedicine, clinical alerts and reminders, computerized provider order entry, computerized clinical decision support systems, consumer health informatics applications, and electronic exchange of health information. Widespread adoption of health information technology (health IT) can foster improvements in quality, safety, efficiency and access – key goals in today’s national dialog on health reform.
1. **Planning and Developing an IT Strategy:** Introduction - Mission of IT in Health Care: Creating a System - Managing the IT Strategic Planning -Process - Strategies in Consulting for the 21st Century - Baylor Health Care - Clarian Health care.
  2. **Preparing For Organizational Change:** Informatics in Health Care: Managing Organizational Change - The Role of Ethics in IT Decisions - Cases in Redesign - Memorial Hermann Healthcare System: Redesign and Implementation of a Multifacility - Clinical Information System - UPMC Health System.
  3. **Transformation:** IT- Transition Fundamentals in Care Transformation -The Role of the CIO - Northwestern Memorial Hospital, Chicago: Patients First from the Ground Up - The Jewish Home and Hospital Lifecare System - NYC.
  4. **Patient-Centered Technologies:** Patient Outcomes of Health Care - Six Sigma Excellence - Electronic Health Record - Interviewing Patients with a Computer - Nursing Administration: A Growing Role in Systems Development - Computer-Enhanced Radiology - Information Technology and the New Culture of Patient Safety - A Component Based Clinical Information and Electronic Health Record.
  5. **Outlook On Future Technologies:** Technologies in Progress - Evidence-Based Medicine - Aligning Process and Technology - Clinical Decision Support Systems - Quality Information and Care - Role for Health Information Systems - Clinical Practice - Connecting the Community for Better Health.

### Reference Book:

1. Healthcare Information Management Systems Cases, Strategies, and Solutions Series: Health Informatics (Ball, Marion; Weaver, Charlotte A.; Kiel, Joan M. (Eds.)) 3rd ed., Springer Berlin Heidelberg New York, 2004.
2. Managing Health Care Information Systems: A Practical Approach for Health Care Executives (Karen A. Wager, Frances Wickham Lee, John P. Glaser) Jossey-Bass, 2005.

