Code.No: 07A71103   R07   SET-1

IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
MEDICAL INFORMATICS
(BIOMEDICAL ENGINEERING)

Time: 3hours   **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks

- - -

1. a)   Write in detail about the evaluation programme for the hospital information systems.
   b)   Write short notes on following:
        i)   Organizational view point.
        ii)   Operating view point.
        iii)   Technological view point.   [16]

2. a)   Explain in detail about the Integrating Patient Oriented Data Processing in to the PRPARE virtual hospital. (Personal Repository for Electronic Patient Records)
   b)   Write short notes on multimedia in the radiology environment.   [8+8]

3. a)   Explain in detail the different systems involved patient centered information systems.
   b)   Write about the functional laboratories.   [8+8]

4. a)   Write in detail about the Clinical Decision Support Systems(CDSS).
   b)   Write short notes on clinical utility of an international thyroid database.   [8+8]

5. a)   Explain in detail about the strategies for medical knowledge acquisition.
   b)   Write short notes on intelligent Decision support.   [10+6]

6. a)   Explain the modeling of health care for information systems development.
   b)   Write short notes on clinical use.   [10+6]

7. a)   Explain in detail important methods involved in Bio Signal Processing methods.
   b)   Write shorts on modeling for Decision support.   [10+6]

8. a)   Explain the costs and benefits of Information systems.
   b)   Write short notes on Project management.   [10+6]

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Code.No: 07A71103   R07   SET-2

IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
MEDICAL INFORMATICS
(BIOMEDICAL ENGINEERING)

Time: 3hours   **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1. a) Explain the different information systems involved in medical informatics.
   b) Write the short notes on following:
            i)   Technological distribution platform.
            ii) Application infrastructure.
            iii) User oriented applications.   [8+8]

2.   Write in detail about the following data base management systems.
        a)   Statistical database management.
        b)   Active database management.   [8+8]

3. a) Explain in detail about the Image Processing and analysis in Bio informatics.
   b) Write the short notes on following:
            i)   Patient Master Index.
            ii) The treatment Episode.
            iii) The Problem list.
            iv) Events.   [8+8]

4. a) Explain briefly about the methods for decision support.
   b) Write short notes on predictive tools for clinical decision support.   [8+8]

5. a) Explain briefly about the predictive tools for Clinical Decision Support System.
   b) Write short notes on conceptual models and for decision support system.   [8+8]

6. a) Write in detail about the health information resources.
   b) Write short notes on technical choices.   [10+6]

7. a) Explain different methods involved in the Bio statistical systems.
   b) Explain in briefly methodology for information processing.   [8+8]

8.   Write in detail about the Security Standards in medical information systems. [16]

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Code.No: 07A71103

R07

SET-3

IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
MEDICAL INFORMATICS
(BIOMEDICAL ENGINEERING)

Time: 3hours   Max.Marks:80

Answer any FIVE questions
All questions carry equal marks
- - -

1. a) Explain following services:
    i)   Act Manager.
    ii)   Communications.
    iii)   Authorisations.
    iv)   Patient Manager.
   b) Explain in detail about the patient history taking mechanisms.   [8+8]

2. a) Explain the communication of medical data across different hospital units.
   b) Write short notes on General Practitioner (GP) information system.   [8+8]

3. a) Explain in detail with figures Bio-signal processing analysis.
   b) Write short notes on Multi Model off-line Bio-signal analysis.   [8+8]

4. a) Explain in detail about the nursing information systems.
   b) Write short on primary care system in bio informatics.   [8+8]

5. a) Write in detail about the supporting interoperability between Medical knowledge
       and Decision support.
   b) Write short notes on knowledge based services for the Public sector medical
       applications.   [8+8]

6. a) Briefly explain Stake holders for institutional information systems.
   b) Write short notes on Feature ratings.   [10+6]

7. a) Explain structuring technology in the computer based patient record system.
   b) Write short notes on pattern recognition.   [10+6]

8.   Explain in detail about the Human Computer Interaction in health care systems,[16]

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Code.No: 07A71103

R07

SET-4

IV B.TECH – I SEM EXAMINATIONS, NOVEMBER - 2010
MEDICAL INFORMATICS
(BIOMEDICAL ENGINEERING)

Time: 3hours   **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1. a)   Write the short notes on following systems:
        i)   Radiology.
        ii)   Act Manager.
        iii)   Authorizations.
        iv)   ADT.
   b)   Explain the different mechanisms involved in patient history for the treatment.[8+8]

2. a)   Write in detail about the Networking and Integration of patient data.
   b)   Write short notes on Clinical Trails Management Systems (CTMS).   [8+8]

3. a)   Explain in detail about the computer based patient record system.
   b)   Write in detail about the Medical Imaging Systems.   [8+8]

4. a)   Explain the different strategies used for medical knowledge acquisition.
   b)   Write short notes on advance technologies available in medical informatics.   [8+8]

5. a)   Explain on the Ontology of a decision support system in health informatics.
   b)   Write short notes recent advances in medical informatics.   [10+6]

6. a)   Explain the different resources available in health information.
   b)   Explain the importance of Clinical use in medical informatics.   [10+6]

7. a)   Explain briefly about evaluation of Clinical information systems.
   b)   Write short notes on Logical operations.   [12+4]

8.   In detail describe about the Standards in health-care informatics and Telematics.
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