

[LB 0212]

AUGUST 2012

Sub. Code: 1504

B.Sc. CARDIAC TECHNOLOGY

FIRST YEAR

PAPER – IV – MEDICAL ELECTRONICS, BIOPHYSICS AND
COMPUTER USAGE RELAVANT TO CARDIAC TECHNOLOGY

Q.P. Code : 801504

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|---|---|----|----|
| 1. Explain Electrocardiography system? | 7 | 20 | 10 |
| 2. Techniques of Monitoring radiation Exposure? | 7 | 20 | 10 |
| 3. Explain Computer usage in Medical Field? | 7 | 20 | 10 |

II. Write Notes on:

- | | | | |
|--|---|----|---|
| 1. What is importance of Blood pressure recording? | 4 | 10 | 5 |
| 2. What is impedance plethsmography? | 4 | 10 | 5 |
| 3. What are the sources of Biomedical signals? | 4 | 10 | 5 |
| 4. Types of Pressure Transducer? | 4 | 10 | 5 |
| 5. What are SPO2 and PLETH? | 4 | 10 | 5 |
| 6. Explain Ionic current? | 4 | 10 | 5 |
| 7. What is CRT? | 4 | 10 | 5 |
| 8. Types defibrillator? | 4 | 10 | 5 |

III. Short Answers on:

- | | | | |
|--|---|---|---|
| 1. Draw Normal ECG Waveform? | 2 | 4 | 3 |
| 2. Application of the Ultrasound? | 2 | 4 | 3 |
| 3. Types of Blood pressure measurement? | 2 | 4 | 3 |
| 4. What is radiation? Types of radiation? | 2 | 4 | 3 |
| 5. What is synchronisation in defibrillator? | 2 | 4 | 3 |
| 6. What is MRI? | 2 | 4 | 3 |
| 7. What are the procedure can be done using fluoroscopy
Exposure? | 2 | 4 | 3 |
| 8. What is Piezo Electric crystal? | 2 | 4 | 3 |
| 9. What is the maximum energy in Defibrillator? | 2 | 4 | 3 |
| 10. What Ultrasound transducer for adult & paediatric
echocardiography? | 2 | 4 | 3 |
