



**PART – B: (Short Answer Questions)****(2 x 5 = 10 Marks)**Q.2. Answer ALL questions

|  | [CO#] | [PO#] |
|--|-------|-------|
| a. List the Sources of Biomedical Signals.                           | 1     | 1     |
| b. What is the use of Microprocessors in Medical Instruments?        | 1     | 1     |
| c. List the characteristics of Transducers.                          | 2     | 2     |
| d. Draw the generalized block diagram for Patient Monitoring System. | 3     | 1     |
| e. Define Leakage current in biomedical devices.                     | 4     | 1     |

**PART – C: (Long Answer Questions)****(6 x 5 = 30 Marks)**Answer ANY FIVE questions

|   | Marks | [CO#] | [PO#] |
|---|-------|-------|-------|
| 3. Explain in detail about Silver-Silver Chloride Electrodes.                         | (6)   | 1     | 1     |
| 4. What are all the general Constraints in Design of Medical Instrumentation Systems? | (6)   | 1     | 1     |
| 5. List the different types of transducers and explain the same in briefly.           | (6)   | 2     | 1     |
| 6. Discuss in detail about Common Impedance Coupling                                  | (6)   | 2     | 1     |
| 7. How to measure heart rate of the patients?   | (6)   | 3     | 1     |
| 8. Discuss about Laser-Doppler Blood Flowmeter operation                              | (6)   | 3     | 1     |
| 9. What is mean by Electric Shock Hazards? How it is prevented?                       | (6)   | 4     | 1     |
| 10. List the Safety Codes for Electro medical Equipment.                              | (6)   | 4     | 1     |

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