



APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Scheme for Valuation/Answer Key

Scheme of evaluation (marks in brackets) and answers of problems/key

SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

Course Code: AE403

Course Name: BIOMEDICAL INSTRUMENTATION

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

Marks

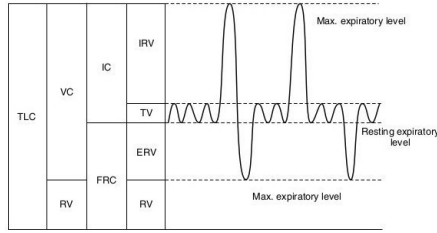
- | | | | |
|---|-----|--|-----|
| 1 | (a) | Definition for resting potential with fig -3 marks | |
| | | Definition for action potential with fig -3 marks | (8) |
| | | Propagation of action potential -2 marks | |
| | (b) | Fig -3 marks | (7) |
| | | Explanation -4 marks | |
| 2 | (a) | Definition -1 mark | (7) |
| | | Any one method for plethysmography fig -3 marks | |
| | | Explanation 3 marks | |
| | (b) | fig -3 marks | (8) |
| | | Explanation 5 marks | |
| 3 | (a) | Synchronous | (8) |
| | | Block Diagram -2 marks Explanation 2 marks | |
| | | asynchronous | |
| | | Block Diagram -2 marks Explanation 2 marks | |
| | (b) | fig -4 marks Explanation 3 marks | (7) |

PART B

Answer any two full questions, each carries 15 marks.

- | | | | |
|---|----|---|------|
| 4 | a) | Oximeter 2 marks ,fig 2 marks ,working 4 marks | (8) |
| | b) | Fig -3 marks Explanation 4 marks | (7) |
| 5 | a) | Explanation of earthing ,microshock, macroshock with necessary fig (10) | (15) |
| | | Preventive technique (5) | |

6 a)



(8)

2 marks

Explanation of volume definition 1.5 mark each(4*1.5) -6MARKS

b) Definition 2 mark

(7)

Diagram 2mark Explanation 3 marks

PART C

Answer any two full questions, each carries 20 marks.

7 a) Diagram 2mark Explanation 8 marks (10)

b) Principle-2 marks,explanation-8marks (10)

8 a) Diagram 4marksExplanation 6 marks application 5 marks (15)

b) Any 5 application (5)

9 a) Diagram 2 mark Explanation 3marks (10)

Diagram 2 mark Explanation 3marks

b) Diagram 4mark Explanation 6 marks (10)
