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| **Scheme of Valuation/Answer Key**  (Scheme of evaluation (marks in brackets) and answers of problems/key) | | | | | | |
| **APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  FIFTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018 | | | | | | |
| **Course Code: EC365** | | | | | | |
| **Course Name: BIOMEDICAL ENGINEERING** | | | | | | |
| Max. Marks: 100 | | |  | Duration: 3 Hours | | |
|  | | | | | | |
| **PART A** | | | | | | |
|  |  | ***Answer any two full questions, each carries 15 marks.*** | | | Marks | |
| 1 | a) | Need for a biomedical instrument  Block diagram  Explanation | | | (2)  (2)  (4) | |
|  | b) | Comparison any five points  Korotkoff sound | | | (5)  (2) | |
| 2 | a) | Name of the method  Principle  Block diagram  Explanation | | | (1)  (2)  (2)  (5) | |
|  | b) | Diagram  Explanation | | | (2)  (3) | |
| 3 | a) | ECG  Sketch with proper marking  Explanation | | | (1)  (3)  (4) | |
|  | b) | Diagram  Explanation | | | (3)  (4) | |
|  |  |  | | |  | |
| **PART B** | | | | | | |
| ***Answer any two full questions, each carries 15 marks.*** | | | | | | |
| 4 | a) | Name of the method  Diagram  Explanation | | | | (1)  (3)  (4) |
|  | b) | Diagram  Explanation | | | | (3)  (4) |
| 5 | a) | definition | | | | (2) |
|  | b) | Figure with proper markings | | | | (5) |
|  | c) | Cardiac defibrillator  Figure of DC defibrillator  Explanation | | | | (2)  (2)  (4) |
| 6 | a) | Figure  Explanation | | | | (3)  (4) |
|  | b) | Surgical diathermy  Techniques | | | | (2)  (6) |
| **PART C** | | | | | | |
| ***Answer any two full questions, each carries 20 marks.*** | | | | | | |
| 7 | a) | Four properties  X ray machine block diagram  Explanation | | | | (2)  (4)  (4) |
|  | b) | Principle  Any five advantages | | | | (5)  (5) |
| 8 | a) | Block diagram  Explanation | | | | (3)  (4) |
|  | b) | Four comparisons | | | | ( 4) |
|  | c) | Block diagram  Explanation | | | | (5)  (4) |
| 9 | a) | Block diagram  Explanation | | | | (5)  (5) |
|  | b) | Three requirements | | | | (3) |
|  | c) | Seven precautions | | | | (7) |
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