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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**  V SEMESTER B.TECH DEGREE EXAMINATION, JULY 2019 | | | | | |
| **Course Code:EE369** | | | | | |
| |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | **Course Name: HIGH VOLTAGE ENGINEERING** | | | | | | | | |
| Max. Marks: 100 | | |  | Duration: 3 Hours | |
| **PART A** | | | | | |
|  |  | ***Answer all questions, each carries5 marks.*** | | | Marks |
| 1 |  | Explanation of any Rectifier circuit with waveform –(5) Marks | | | (5) |
| 2 |  | Draw basic circuit -2 marks , wave form -1 mark , explanation -2 marks | | | (5) |
| 3 |  | Give basic circuit diagram -2 marks, Limitations -3 marks | | | (5) |
| 4 |  | Explanation -5 marks | | | (5) |
| 5 |  | Circuit and explanation - 2+3 marks | | | (5) |
| 6 |  | Explanation -5 marks | | | (5) |
| 7 |  | Classification -5 marks | | | (5) |
| 8 |  | Explanation -5 marks | | | (5) |
| **PART B** | | | | | |
| ***Answer any twofull questions, each carries10 marks.*** | | | | | |
| 9 | a) | Derivation of voltage regulation in voltage multiplier circuits-10 marks | | | (10) |
| 10 | a) | Principle of operation -2 marks, circuit -2 marks, application and limitation -(1+1) marks | | | ( 6) |
|  | b) | Circuit and Explanation(2+2) marks | | | (4) |
| 11 | a) | Diagram 2marks , working -2 marks | | | (4) |
|  | b) | Wave front time -3 marks  Wave tail time -3 marks | | | (6) |
| **PART C** | | | | | |
| ***Answer any two full questions, each carries10 marks.*** | | | | | |
| 12 | a) | Circuit and explanation 4 marks  Limitations -2 marks | | | ( 6) |
|  | b) | Principle of operation -4 marks | | | ( 4) |
| 13 | a) | Circuit and Explanation (3+3)marks | | | (6) |
|  | b) | Circuit , construction , application - (2+1+1)=4marks | | | (4) |
| 14 | a) | Circuit-2 marks, working - 3 marks | | | (6) |
|  | b) | Explanation -5marks | | | (4) |
| **PART D** | | | | | |
| ***Answer any twofull questions, each carries 10 marks.*** | | | | | |
| 15 | a) | Circuit-2 marks, explanation -3marks | | | (5) |
|  | b) | 4 Types of tests - 1/2mark each =2marks , explanation -3 marks | | | (5) |
| 16 | a) | Explanation -5 marks | | | (5) |
|  | b) | Circuit-2 marks, explanation -3 marks | | | (5) |
| 17 | a) | Explanation -5marks | | | (5) |
|  | b) | Explanation -5 marks | | | (5) |
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