



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(S) DEGREE EXAMINATION, MAY 2019

Course Code: EE305

Course Name: POWER ELECTRONICS

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 5 marks.

Marks

- | | | |
|---|--|-----|
| 1 | Characteristics -3, Operation 2 | (5) |
| 2 | Circuit diagram – 2, Waveform – 2, Explanation 1 | (5) |
| 3 | Circuit 2, derivation 3 | (5) |
| 4 | Explanation 5 | (5) |
| 5 | Diagram 3, explanation 2 | (5) |
| 6 | Derivation 5 | (5) |
| 7 | Figure 2, explanation 3 | (5) |
| 8 | Figure 2, explanation 3 | (5) |

PART B

Answer any two full questions, each carries 10 marks.

- | | | |
|----|--|-----|
| 9 | a) Figure 2, explanation 3 | (5) |
| | b) Figure 2, explanation 3 | (5) |
| 10 | a) Circuit 2, waveform 3 | (5) |
| | b) Explanation 5 | (5) |
| 11 | a) Ratings 5 | (5) |
| | b) Application of correct expressions – 2, Correct substitution and result 3 | (5) |

PART C

Answer any two full questions, each carries 10 marks.

- | | | |
|----|---|-----|
| 12 | a) Circuit 3, explanation 2 | (5) |
| | b) Waveform with
Input voltages – 1, Output voltage -2, output current 2 | (5) |
| 13 | a) Description 2, circuit 3 | (5) |
| | b) Phase voltage – 3, line voltage 2 | (5) |
| 14 | a) Solution 5 | (5) |



- b) Circuit 3, explanation 2. (5)

PART D

Answer any twofull questions, each carries 10 marks.

- 15 a) Explanation of three methods 5 (5)
b) Circuit – 2, output wave – 2, explanation 1 (5)
- 16 a) Figure 3, explanation 2 (5)
b) Circuit 2, waveform 2, explanation 1 (5)
- 17 a) Description of types 5 (5)
b) Correct solution 5 (5)

