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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Scheme for Valuation/Answer Key

Scheme of evaluation (marks in brackets) and answers of problems/key
FIRST/SECOND SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019

Course Code: EC100

Course Name: BASICS OF ELECTRONICS ENGINEERING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 5 marks.

		Marks
1	4 applications – each 1.25 marks	(5)
2	3 diagrams – 3 x 1 marks, Comparison – 2 marks	(5)
3	Block diagram – 3 marks, Explanation – 2 marks.	(5)
4	Since the syllabus do not mention OPAMP parameters in detail, the student may be awarded 5 marks for defining an ideal OPAMP and proportional marks may be given for writing about an OPAMP	(5)
5	Concept – 1 mark, Explanation of - AM – 2 marks, FM – 2 marks.	(5)
6	Definition – 2 marks, Explanation – 3 marks.	(5)
7	a- Any mobile communication aspect. 2.5 marks, b – 2.5 marks.	(5)
8	Advantages – 2 marks, Sources and detectors – 1.5 marks each.	(5)

PART B

Answer six questions, one full question from each module and carries 10 marks.

Module 1

- 9 a) 2 points – 4 marks (4)
b) Two types – 3 marks each (6)

OR

- 10 a) Diagram – 2 marks, Explanation – 3 marks. (5)
b) Diagram – 1 mark, Explanation – 2 marks, Applications – 2 marks. (5)

Module 1I

- 11 a) 2.5 marks each (5)
b) 2.5 marks each (5)

OR

- 12 LED – Diagram – 2 marks, Explanation - 3 marks. (10)
Photo diode – Diagram – 2 marks, Explanation - 3 marks.



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Module III

- 13 a) Diagram – 3 marks, Explanation - 4 marks.,
Problem values – 1 mark each. (10)

OR

- 14 Circuit diagram – 3 marks, Wave forms - 3 marks, Working – 4 marks. (10)

Module IV

- 15 Inverting – diagram 3 marks, Gain equation– 2 marks
Non-inverting – diagram 3 marks, Gain equation– 2 marks (10)
(Derivation not required)

OR

- 16 Block diagram – 5 marks, Explanation - 5 marks. (10)

Module V

- 17 a) Expression – 2 marks, Explanation – 2 marks. (4)
b) Block diagram – 3 marks, Explanation - 3 marks. (6)

OR

- 18 Block diagram – 5 marks, Explanation - 5 marks. (10)

Module VI

- 19 a) Block diagram – 2 marks, Explanation - 3 marks. (5)
b) Block diagram – 3 marks, Explanation - 2 marks. (5)

OR

- 20 a) Concept – 2 marks, Explanation - 3 marks. (5)
b) Block diagram – 2 marks, Explanation - 3 marks. (5)
