

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Scheme for Valuation/Answer Key

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

Course Code: BE101-02

Course Name: INTRODUCTION TO MECHANICAL ENGINEERING SCIENCES

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two questions, each carries 15 marks.

Marks

- | | | | |
|---|----|--------------------------------------------------------------------|------|
| 1 | a) | Explanation with P V and T S diagram– 7 marks, limitations-3 marks | (10) |
| | b) | Statement-3 marks, significance- 2 marks | (5) |
| 2 | a) | Classification-2 marks, description- 5 marks | (7) |
| | b) | Explanation-3 marks, sketch- 3 marks, merit and demerit-2 marks | (8) |
| 3 | a) | Any five milestones-5 marks | (5) |
| | b) | Explanation- 5 marks, sketches with P V Diagram – 5 marks | (10) |

PART B

Answer any two questions, each carries 15 marks.

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|---|----|-----------------------------------------------------|-----|
| 4 | a) | Significance -2 marks, sketch and marking – 6 marks | (8) |
| | b) | Sketch- 3 marks, explanation -4 marks | (7) |
| 5 | a) | Sketch- 3 marks, explanations- 4 marks | (7) |
| | b) | Block diagram- 5 marks, role-3 marks | (8) |
| 6 | a) | Explanations – 7 marks | (7) |
| | b) | Explanation – 4 marks, diagram – 4 marks | (8) |

PART C

Answer any two questions, each carries 20 marks.

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|---|----|-------------------------------------------------------------|------|
| 7 | a) | Types – 3 marks, explanation- 7 marks | (10) |
| | b) | Properties – 6 marks, applications-4marks | (10) |
| 8 | a) | Sketch-4marks, description-6marks | (10) |
| | b) | Differentiation- 4 marks, diagram with parts- 6 marks | (10) |
| 9 | a) | Description-6 marks, sketch-4 marks | (10) |
| | b) | Suggestion – 1 mark, Explanation- 5 marks, diagram- 4 marks | (10) |
