

R1906

Final Scheme/ Answer Key for Valuation

Scheme of evaluation (marks in brackets) and answers of problems/key

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

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) Definition-2 marks, explanation-3 marks | (5) |
| | b) solution- 4 marks, justification-2 marks | (6) |
| | c) Enthalpy-2 marks, internal energy-2 marks | (4) |
| 2 | a) Explanation- 5 marks, sketch – 3 marks | (8) |
| | b) Explanation- 5 marks, sketch – 2 marks | (7) |
| 3 | a) Description-5 marks | (5) |
| | b) Differentiation- 5 marks | (5) |
| | c) Comparison any 5 points– 5 marks | (5) |

PART B

Answer any two questions, each carries 15 marks.

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|---|---|------|
| 4 | a) Description – 6 marks, diagram-2 marks, P-h or T-S diagram-2 marks | (10) |
| | b) Explanation- 3 marks, sketch – 2 marks | (5) |
| 5 | a) Explanation- 6 marks, sketch – 4 marks | (10) |
| | b) sketch – 5 marks | (5) |
| 6 | a) Explanation- 5 marks, sketch – 4 marks | (9) |
| | b) 3 points each-6 marks | (6) |

PART C

Answer any two questions, each carries 20 marks.

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|---|--|------|
| 7 | a) Definitions- 10 marks | (10) |
| | b) 2 marks each | (10) |
| 8 | a) Explanation- 6 marks, approximate sketch – 4 marks | (10) |
| | b) Explanation- 6 marks, sketch – 4 marks | (10) |
| 9 | a) Properties of ceramics 3 marks, Properties of composites 3 marks. Relevant fields of applications 2 points each 2 + 2 = 4 marks | (10) |
| | b) Diagram- 7 marks, labelling – 3 marks | (10) |
