

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Scheme for Valuation/Answer Key

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

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019

Course Code: AE410

Course Name: POWER PLANT INSTRUMENTATION

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

- | | | Marks |
|---|---|-------|
| 1 | a) Diagram 3 marks
Explanation 7 marks | (10) |
| | b) Diagram 3 marks
Explanation 2 marks | (5) |
| 2 | a) Diagram 2 marks
Explanation 3 marks | (5) |
| | b) Diagram 2 marks
Explanation 3 marks | (5) |
| | c) Air preheating(2), Superheating(3) | (5) |
| 3 | a) Diagram 3marks
Explanation 5 marks | (8) |
| | b) Diagram 3 marks
Explanation 4 marks | (7) |

PART B

Answer any two full questions, each carries 15 marks.

- | | | |
|---|--|-----|
| 4 | a) Explanation – 3marks
Diagram -2 marks | (5) |
| | b) Explanation – 5marks | (5) |
| | c) Explanation – 3marks
Diagram -2 marks | (5) |
| 5 | a) Explanation of power factor – 2.5marks
Explanation of frequency – 2.5marks | (5) |
| | b) Explanation – 3marks
Diagram -2 marks | (5) |
| | c) Explanation – 3marks
Diagram -2 marks | (5) |



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- 6 a) Explanation –4marks (7)
Diagram -3 marks
- b) Explanation – 5marks (8)
Diagram -3 marks

PART C

Answer any two full questions, each carries 20 marks.

- 7 a) Control techniques -7marks (10)
Figure-3marks
- b) Interlocks + brief details = 5 marks (5)
- c) Performance Comparison = 5 marks (5)
- 8 a) Need for reactor control – brief details = 7 marks (7)
- b) Importance-5marks (5)
- c) Details on measurements = 8marks (8)
- 9 a) Explanation – 7marks (10)
Diagram -3 marks
- b) Diagram (5), symbols and markings (5) (10)

