



A1106

Pages: 2

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: BE101-01

Course Name: INTRODUCTION TO CIVIL ENGINEERING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 1 mark.

| | | Marks |
|---|------------|-------|
| 1 | Definition | (1) |
| 2 | Definition | (1) |
| 3 | Definition | (1) |
| 4 | Definition | (1) |
| 5 | Definition | (1) |
| 6 | Definition | (1) |

PART B

Answer all questions, each carries 5 marks.

| | | |
|----|---|-----|
| 7 | Four types, with explanation | (5) |
| 8 | List of methods (2 Marks). Any three methods, with explanation (1 mark each). | (5) |
| 9 | Any five, 1 mark each | (5) |
| 10 | Each carry one mark | (5) |
| 11 | Any five defects, 1 mark each | (5) |
| 12 | Any roofing materials (3) selection criteria (2) | (5) |

PART C

Module I & II

Answer any three full questions, each carries 6 marks.

| | | |
|----|--|-----|
| 13 | Any six types of buildings | (6) |
| 14 | Parts of a building with explanation (3), neat sketch and labels (3) | (6) |
| 15 | Any three tests on bricks with explanation (3×2=6 marks) | (6) |
| 16 | Explanation of steps | (6) |

Module III & IV

Answer any three full questions, each carries 6 marks.

| | | |
|----|--|-----|
| 17 | Composition of ordinary cement (2), required percentage (2) and function of each ingredient (2). | (6) |
| 18 | Flakiness index (3), elongation index (3) | (6) |



A1106

Pages: 2

19 Any six types of stone masonry with explanation and sketch (1 mark each) (6)

20 English bond (3) and Flemish bond (3), i.e. Peculiarities of the bond (1 mark), sketch of elevation (2 marks) for each bond (6)

Module V& VI

Answer any four full questions, each carries 7marks.

21 List (1 mark), Any three methods with explanation (6 marks) (7)

22 Explain manufacturing process (2 marks) and uses (1.5 marks) for both hard board and particle board (3.5×2=7 marks) (7)

23 Differences in composition of the three types of steel (1 mark, desirable). Uses and properties of mild steel, medium steel and high carbon steel (2×3=6 marks) (7)

24 Truss (1) Sketch any three types of trusses (2×3=6 marks). (7)

25 a) Terrazzo flooring (3.5) (7)

b) Tiled flooring (3.5)

