

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
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.

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|---|----------------------------------|-------|
| 1 | What is a silo? | (1) |
| 2 | What is efflorescence in bricks? | (1) |
| 3 | Define standard consistency. | (1) |
| 4 | What is dry masonry? | (1) |
| 5 | What is tor steel? | (1) |
| 6 | Define span of a roof. | (1) |

PART B

Answer all questions, each carries 5 marks.

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| 7 | How buildings are classified based on fire resistance offered by buildings? | (5) |
| 8 | Describe briefly various methods of quarrying. | (5) |
| 9 | List the desirable qualities of aggregate for concrete. | (5) |
| 10 | Define the following terms with respect to brick masonry a) King closer
b) Queen closer c) Bat d) Quoin header e) Course | (5) |
| 11 | What are the defects in timber? | (5) |
| 12 | What are the different roofing materials and its selection criteria? | (5) |

PART C

Module I & II

Answer any three full questions, each carries 6 marks.

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| 13 | How buildings are classified based on National Building Code? | (6) |
| 14 | What are the different parts of a building? Explain with neat sketches? | (6) |
| 15 | Explain the laboratory tests on bricks. | (6) |
| 16 | Discuss the steps involved in the manufacture of tiles. | (6) |

Module III & IV

Answer any three full questions, each carries 6 marks.

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| 17 | Write the composition of ordinary cement indicating the required percentage and function of each ingredient. | (6) |
| 18 | Explain the tests to determine the flakiness index and elongation index of aggregate. | (6) |

- 19 Explain the classification of stone masonry. (6)
- 20 Explain the English bond and Flemish bond in brick masonry with neat figures. (6)

Module V & VI

Answer any four full questions, each carries 7 marks.

- 21 Explain the different methods of preservation of timber. (7)
- 22 Describe the manufacturing process and uses of hard board and particle board. (7)
- 23 Discuss the use and properties of mild steel, medium steel and high carbon steel. (7)
- 24 What is a truss? Sketch any three types of truss. (7)
- 25 Write short notes on (7)
- a) Terrazzo flooring
 - b) Tiled flooring
