**D**                          **A192006**                          **Pages: 2**

Reg No.:_____                    Name:_____

# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
## FIRST SEMESTER B.TECH DEGREE EXAMINATION(S), DECEMBER 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 | What is a retaining wall? | (1) |
| 2 | List different types of roofing tiles. | (1) |
| 3 | Define fineness modulus of aggregate. | (1) |
| 4 | What is rubble masonry? | (1) |
| 5 | What are knots in timber? | (1) |
| 6 | What type of roof is preferred in areas of heavy rainfall? | (1) |

## PART B
### *Answer all questions, each carries 5 marks.*

| | | |
|---|---|---|
| 7 | Explain residential buildings and educational buildings as per NBC. | (5) |
| 8 | What are the steps involved in the manufacturing of bricks? | (5) |
| 9 | What are the basic ingredients of cement? | (5) |
| 10 | Compare Brick masonry and Stone masonry | (5) |
| 11 | Write short notes on Particle Board and Hard Board. | (5) |
| 12 | What are the different flooring materials and its selection criteria? | (5) |

## PART C

### Module I & II

#### *Answer any three full questions, each carries 6 marks.*

| | | |
|---|---|---|
| 13 | What are the criteria for the selection of site for a residential building? | (6) |
| 14 | What are the different parts of a building? Explain with neat sketches? | (6) |
| 15 | Write the field tests on bricks. | (6) |
| 16 | Explain classification of stones. | (6) |

### Module III & IV

#### *Answer any three full questions, each carries 6 marks.*

| | | |
|---|---|---|
| 17 | Explain any three tests on aggregate. | (6) |
| 18 | What is cement mortar? What are its uses? | (6) |
| 19 | With neat sketches, explain the classification of Ashlar masonry. | (6) |
| 20 | Draw the plan and elevation of 1- brick wall English Bond. | (6) |

### Module V& VI
#### *Answer any four full questions, each carries 7marks.*

| 21 | Explain the different methods of preservation of timber. | (7) |
| 22 | Explain the manufacturing process of hard board?  What are its uses and advantages? | (7) |
| 23 | Differentiate between TMT and HYSD bars. Describe the properties of each of them in detail. | (7) |
| 24 | What is a truss? Sketch any three types of trusses. | (7) |
| 25 | List out the different types of floor covering materials. Explain any three types in detail. | (7) |

****