

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST/SECOND SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019

Course Code: CE100

Course Name: BASICS OF CIVIL ENGINEERING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks.

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| 1 | List down the various disciplines of Civil Engineering. | (3) |
| 2 | Define (a) Plinth area (b) Carpet area. | (3) |
| 3 | What are the basic principles of surveying? | (3) |
| 4 | Explain any two types of steel sections available in the market with sketches. | (3) |
| 5 | Explain the purpose of foundations. | (3) |
| 6 | Explain the terms (a) Quoin (b) Closer in brick bonding. | (3) |
| 7 | What are different types of roofs? | (3) |
| 8 | Differentiate between Elevators and Escalators. | (3) |
| 9 | What are the factors to be considered for air conditioning a building? | (3) |
| 10 | What is a ramp? Write short notes on its Civil Engineering aspects. | (3) |

PART B

Answer any eight questions, each carries 6 marks.

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| 11 | List out the type of building as per occupancy. Explain any four. | (6) |
| 12 | Explain the components of a building with neat figure. | (6) |
| 13 | List the steps in setting out of building by centre line method. | (6) |
| 14 | What are the open space requirements as per NBC norms? | (6) |
| 15 | Draw a site plan incorporating all the necessary details. | (6) |
| 16 | Explain the various instruments used for levelling. | (6) |
| 17 | Give short notes on (a) EDM (b) Total Station (c) GPS | (6) |
| 18 | Write any three properties of good bricks. | (6) |
| 19 | Explain the constituents of cement mortar and explain the steps involved in the hand mixing of cement mortar. | (6) |
| 20 | List out the uses of steel in building construction. | (6) |

PART C

Answer any two questions, each carries 11 marks.

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| 21 | a) Explain the procedure of plastering. | (6) |
| | b) Explain the concept of intelligent buildings. | (5) |
| 22 | a) Explain the types of shallow foundations. | (6) |

- b) List out the types of floor finishing materials available? Explain any 2 of them. (5)
- 23 a) Write short notes on uses of (a) chimney (b) water tanks (c) towers. (6)
- b) What are the civil engineering aspects of sound proofing? (5)
