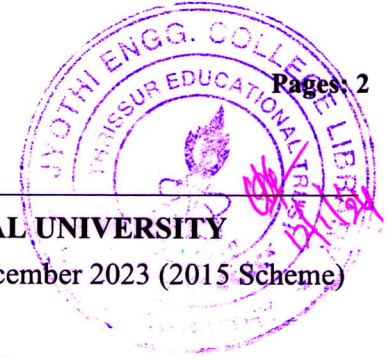


Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S1 (S, FE) S2 (S, FE) Examination December 2023 (2015 Scheme)

**Course Code: CE100****Course Name: BASICS OF CIVIL ENGINEERING**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 3 marks*

- | | | Marks |
|----|---|-------|
| 1 | List various disciplines of civil engineering. | (3) |
| 2 | What are the function of doors and windows in a building? | (3) |
| 3 | What are the commonly adopted open space requirements for a residential building? | (3) |
| 4 | Define a) plinth area, b) floor area and c) carpet area | (3) |
| 5 | Differentiate between escalators and elevators | (3) |
| 6 | Differentiate between stretcher bond and header bond. | (3) |
| 7 | List different types of roofing materials | (3) |
| 8 | Write any three functions of foundation | (3) |
| 9 | What are ramps? What are the design considerations for construction of ramps? | (3) |
| 10 | Write short notes on water tanks. | (3) |

PART B*Answer any eight questions, each carries 6 marks*

- | | | |
|----|---|-----|
| 11 | What are the factors to be considered while selecting the site for residential building? | (6) |
| 12 | What is a site plan? What are the information to be included in a site plan? | (6) |
| 13 | Explain classification of buildings as per NBC | (6) |
| 14 | Discuss the various principles of building planning | (6) |
| 15 | What are the instruments used for ranging? Explain direct ranging. | (6) |
| 16 | The following consecutive readings are taken on a level with station A as benchmark. (Reduced level of station A is 150.00m). 2.190, 3.160, 1.050, 0.230, 3.440, 3.170, 3.420, 3.720, 2.390. The instrument is shifted after the fifth reading. Enter these readings in a level book and calculate the reduced level of all points? | (6) |
| 17 | Write short notes on digital level and total station. | (6) |

- 18 Describe different types of cement and its uses. (6)
- 19 Describe different types and market forms of steel (6)
- 20 Differentiate between PCC and RCC (6)

PART C

Answer any two questions, each carries 11 marks

- 21 a) Explain classification of foundation with neat sketch. (6)
- b) Explain the procedure of painting wood surface (5)
- 22 a) Discuss the various types of flooring materials (6)
- b) Write short notes on towers (5)
- 23 a) Explain the classification of air conditioning system (5)
- b) Explain the importance and features of intelligent building (6)
