

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST SEMESTER B.TECH DEGREE EXAMINATION(S), DECEMBER 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.

		Marks
1	According to NBC, what are features of an assembly building and a hazardous building?	(3)
2	What is the importance of orientation of a building?	(3)
3	What are the advantages of GPS?	(3)
4	Explain the constituents of concrete.	(3)
5	What is the difference between bat and closer in brick masonry?	(3)
6	Define bearing capacity of soil.	(3)
7	List out the functions of plastering.	(3)
8	What is a ramp? What are the Civil engineering aspects to be considered in its construction?	(3)
9	What are the functions of communication towers?	(3)
10	List out the features of intelligent buildings.	(3)

PART B

Answer any eight questions, each carries 6 marks.

11	What are functions of (a) lintels, (b) sunshades and (c) walls in a building?	(6)
12	What are the factors to be considered for planning a residential building?	(6)
13	What are the factors to be considered while selecting the site for an industrial building?	(6)
14	Write short note on built up area, room size and open space requirements.	(6)
15	Explain the centre line method adopted for setting out of a building.	(6)
16	Explain the classification of surveying.	(6)
17	Differentiate between (a) back sight and fore sight (b) reduced level and bench mark.	(6)
18	Write short notes on (a) EDM (b) Digital level.	(6)
19	Explain the following properties of bricks: (a) water absorption (b) fire resistance (c) efflorescence.	(6)
20	What are the grades of concrete? Explain.	(6)

PART C

Answer any two questions, each carries 11 marks.

- 21 a) What are advantages and disadvantages of flat roofs and pitched roofs? (6)
b) Compare and contrast elevators and escalators. (5)
- 22 a) Neatly sketch the elevation and plan of header bond and stretcher bond each with 40cm height and 80cm length? (6)
b) Explain the procedure of plastering a brick wall? (5)
- 23 a) Write short notes on uses of (a) Chimney (b) Towers. (6)
b) Explain in detail about the various sound proofing materials commonly adopted in buildings. (5)
