E   S2024
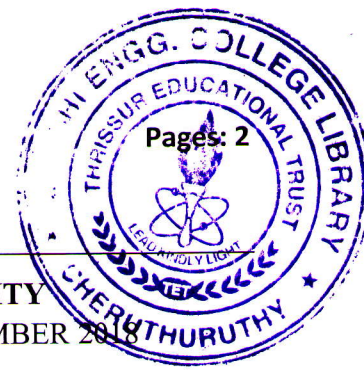
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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

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
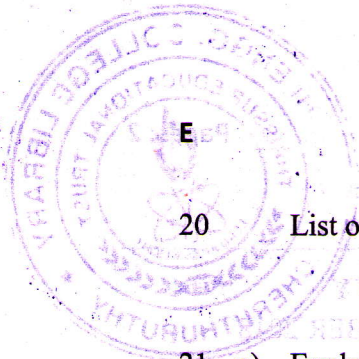
1	Write short note on the features of Educational building and Institutional building as per NBC.	(3)
2	What are the commonly adopted open space regulations for a residential building?	(3)
3	What are the advantages of total station?	(3)
4	Differentiate between PCC and RCC.	(3)
5	Differentiate between header and stretcher bond through sketches.	(3)
6	Explain any three functions of foundation.	(3)
7	List out the types of paints commonly available in market.	(3)
8	What are the design parameters of elevators?	(3)
9	What are the functions of tower?	(3)
10	List out the classification of air conditioning system.	(3)

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

11	Why is proper planning important for the construction of a building? What are the various stages of planning a building?	(6)
12	What are the various components of a residential building? Illustrate the parts with a neat sketch.	(6)
13	What are the factors to be considered while selecting the site for a residential building?	(6)
14	Differentiate between carpet area and floor area.	(6)
15	Explain the procedure adopted for setting out a single room building.	(6)
16	What do you mean by ranging? What are the instruments used for ranging?	(6)
17	The following staff reading were observed successively with a level, the instrument having been moved after third, sixth and eighth reading: 2.228, 1.606, 0.988, 2.090, 2.864, 1.262, 0.602, 1.982, 1.044, 2.684 m. Enter the above readings in a page of level field book and calculate the R.L. of points if the first reading was taken with a staff held on a bench mark of 100 m.	(6)
18	Write short notes on Total Station and GPS.	(6)
19	What is the composition of Ordinary PortlandCement? Explain.	(6)

20   List out the properties of various types of steel used in building construction.   (6)

PART C
Answer any two questions, each carries 11 marks.

21 a) Explain the procedure of painting a plastered wall.   (6)

    b) Explain the importance and features of intelligent buildings.   (5)

22 a) How are foundations classified? Explain with figures any two types.   (6)

    b) List down the different roofing materials and explain any two commonly used   (5)
        types of roofing materials.

23 a) Write short notes on uses and types of (a) Chimney (b) Towers.   (6)

    b) What are the Civil Engineering aspects to be taken care of while planning and   (5)
        constructing a ramp?

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