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Reg. No.:_____ Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIRST SEMESTER B.TECH DEGREE EXAMINATION, JANUARY 2017

Course Code: CE 100

Course Name: BASICS OF CIVIL ENGINEERING

Max. Marks: 100 Duration: 3 Hours

PART A

Answer ALL questions. Each question carries 3 marks.

1. What is National Building Code?
2. What is floor area ratio? Mention its importance.
3. Differentiate fore-sight, back-sight and intermediate-sight.
4. Explain the quality classification of bricks.
5. Write a note on Bearing Capacity of Soil.
6. What are the differences between shallow and deep foundation?
7. What are the purposes of Plastering?
8. What is a ramp? Where ramps are used?
9. What are purposes of air conditioning?
10. Define a tall structure with examples.

PART B

Answer any 8 questions. Each question carries 6 marks.

11. Distinguish between substructure and superstructure of a building.
12. What are the factors to be considered while selecting a site for a building?
13. What are the principles of planning? Explain
14. What are open space requirements as per N.B.C norms?
15. Explain the procedure for setting out of a building.
16. What are the classifications of surveying? Explain primary classification.
17. Write a short note on total station and digital level.
18. Calculate the R.L. of each point and apply, the usual checks, for the following dumpy level consecutive readings. The instrument having been shifted after the fourth and

eighth readings. The first reading was taken on the B.M. of 552.850 m. Adopt height of collimation method.

0.885, 1.640, 2.890, 3.010, 0.955, 0.695, 0.585, 0.255, 1.535, 1.000 and 2.140

19. What are the different types of cement? Explain their uses.
20. Explain the properties and uses of different types of steel.

PART C

Answer any 2 full questions.

21. a) Explain & Draw a neat sketch of plan and elevation of one brick thick wall with English bond. (5)

    b) Describe the various types of pile foundation. (6)

22. a) Explain in detail plastering techniques. (5)

    b) What are the factors to be considered while designing a ramp? (6)

23. a) Explain classification of air conditioning systems. (5)

    b) Explain the principles of acoustics and acoustical defects. (6)