

10108

Reg. No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIRST SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2016

Course Code: BE101-01

Course Name: INTRODUCTION TO CIVIL ENGINEERING

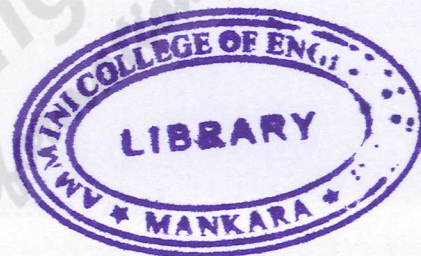
Max. Marks: 100

Duration: 3 Hours

PART A

Answer ALL questions. Each question carries 1 mark

1. The discipline of civil engineering that deals with purification of drinking water and waste water disposal is _____.
2. How igneous rocks are formed?
3. Which cement is ideal for under water construction?
4. What is a brick bat?
5. What is seasoning of timber?
6. Define span of a roof.



PART B

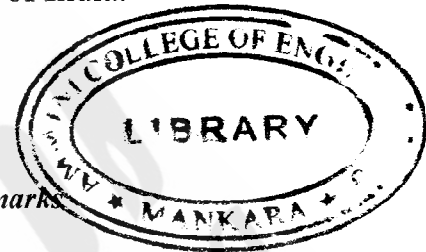
Answer ALL questions. Each question carries 5 marks

7. Explain setting out of a building.
8. Describe any 3 tests conducted on stones.
9. Give reasons for the following: (i) During the grinding of cement a small quantity of gypsum is added (ii) The proportion of lime in cement is to be carefully maintained (2.5 marks each)
10. Make a short note on Random rubble masonry.
11. What are the defects found in timber?
12. Write the criteria for selection of roofing materials.

PART C

Answer Any Three questions. Each question carries 6 marks

13. Draw a neat section of a residential building showing various components?
14. Classify the types of buildings as per National Building Code of India.
15. Describe about the classification of bricks.
16. What are the qualities of a good building stone?



Answer Any Three questions. Each question carries 6 marks

17. Explain with a schematic diagram, the different steps involved in wet process for the manufacturing of cement.
18. Explain the different tests for coarse aggregates.
19. Draw the plan and elevation of (a) One brick wall (b) One and half brick wall (c) Two brick wall, in English bond. (2 marks each)
20. What are the different types of ashlar rubble masonry?

PART D

Answer Any Four questions. Each question carries 7 marks

21. Compare the characteristics of soft wood and hard wood in timber.
22. Sketch and explain any three structural steel sections.
23. Compare different aspects of natural seasoning and artificial seasoning.
24. What are the different flooring materials and explain factors affecting choice of flooring material?
25. Explain the different types of sloping roofs with neat diagrams.