

**10109**

Reg. No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

FIRST SEMESTER B.TECH DEGREE SPECIAL EXAMINATION, SEPTEMBER 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 branch of civil engineering which deals with soil and foundation is called.....
2. ....is an example of sedimentary rock.
3. The main ingredient used in the manufacture of Ordinary Portland Cement is .....
4. Define a queen closer.
5. The abbreviation R.S.J stands for .....in steel sections.
6. List two types of flooring materials

**PART B***Answer ALL questions. Each question carries 5 marks*

7. How buildings are classified based on occupancy as per National Building Code?
8. What are the different methods of quarrying?
9. Write three laboratory tests for assessing the quality of cement.
10. Write any three essential features of an English bond
11. What do you mean by preservation of timber & list the various methods of preservation of timber?
12. List out the types of floor and floor covering.

**PART C***Answer Any Three questions. Each question carries 6 marks*

13. What is the role of civil engineers in infrastructure development?
14. Explain a) dams b) silos c) roads d) chimneys

15. What are the constituents of a good brick earth?
16. Explain three different tests on tiles.

*Answer Any Three questions. Each question carries 6 marks*

17. What are the constituents of ordinary Portland cement? Explain the functions of each constituent.
18. Explain the different tests on aggregates.
19. Enumerate the different types of bonds used in brick masonry.
20. What are the different types of rubble masonry?

### **PART D**

*Answer Any Four questions. Each question carries 7 marks*

21. Explain five methods of artificial seasoning of timber.
22. How is particle board manufactured? What are the specific usages of particle board?
23. Classify steel based on its carbon content and explain its engineering applications.
24. What are the different types of flat roof used in building construction? Explain with neat sketches.
25. Explain with neat sketch the different components of a steel roof truss.