

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

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
FIRST SEMESTER B. TECH DEGREE EXAMINATION, JANUARY 2017Course Code: **BE101-01**Course Name: **INTRODUCTION TO CIVIL ENGINEERING**

Max. Marks: 100

Duration: 3 Hours

**PART A***Answer ALL questions. Each question carries ONE mark*

1. What is meant by assembly building?
2. Which is the major constituent in good brick earth? If it is excess, how does it affect the quality of brick?
3. What is indicated by grade of cement?
4. Define bonding in brick masonry.
5. What is meant by seasoning of timber? List the various methods of seasoning of timber.
6. Differentiate gable roof and gambrel roof.

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

7. How will you set out a room of size 5m X 6m?
8. What are the qualities of good building stones?
9. What are the basic ingredients of cement? Explain the functions of each?
10. Differentiate rubble masonry and ashlar masonry.
11. What are the defects due to natural forces in timber? Explain any *four*?
12. List the advantages of flat roof compared to sloped roof.

**PART C**

***Answer ANY THREE questions. Each question carries SIX marks***

13. What is the relevance of Civil Engineering in the infrastructural development of the country?
14. Explain the functions of any *four* components of a building with a neat sketch.
15. Write the procedure of any *three* tests for checking the quality of stones?
16. List out the quality tests on bricks. Explain any *two* in detail.

***Answer ANY THREE questions. Each question carries SIX marks***

17. Write the test procedure for finding the initial setting time of cement. What is its specification?
18. Define fineness modulus of aggregates. Write test procedure for finding out the fineness modulus.
19. Explain *any two* types of ashlar masonry with neat sketches.
20. Draw the plan and elevation of *two brick thick* English bond.

**PART D**

***Answer ANY FOUR questions. Each question carries SEVEN marks***

21. Explain the manufacturing process of particle board? What are its uses and advantages?
22. List out the market forms of steel. Explain *any two* with figure?
23. What are the selection criteria for flooring material?
24. What are the different types of sloped roofs? Explain *any two* with figure?
25. What are the factors to be considered while selecting the roofing materials?