# B1D003

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Reg. No.

Name:

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY FIRST SEMESTER B. TECH DEGREE EXAMINATION, JANUARY 2017

Course 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.



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#### 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?

