10107

Reg. No.:

Name:

FIRST SEMESTER B TECH DEGREE EXAMINATION, JAN

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. What is a retaining wall?

2. What is the minimum compressive strength of brick?

- J. List out the grades of Ordinary Portland Cement.
- 4. Which is the strongest bond in brickwork?
- 5. What is the full form of TMT steel?
- 6. Write any one relevant factor for selecting suitable flooring material

Part B

Answer ALL questions. Each question carries 5 marks

| 7. | a) List out the various building components of your house | (2) |
|-----|--|-------------|
| | (b) Give the functions of any three building components. | (3) |
| 8. | List out the various types of tiles used in civil engineering. | (5) |
| 9. | What are fine aggregates and coarse aggregates?. Write a laboratory test for as | sessing the |
| | grading of aggregates. | (2+3) |
| 10. | Draw the plan and elevation of (a) One and half brick wall (b) Two brick wall, in Er | nglish bond |
| | | (2.5+2.5) |
| 11. | What are the uses of mild steel? | (5) |
| 12. | What are the different types of roofing material? | (5) |

Part C

Answer Any 3 questions. Each question carries 6 marks

13. Explain setting out of a building

- 14. Classify the types of buildings as per National Building Code of India
- 15. Discuss the various tests conducted on roofing tiles.

16. Explain the classification of stones.

Answer Any 3 questions. Each question carries 6 marks

| 17. | Explain (a) Fineness test of cement (b) Initial and final setting ti | me test of cement | (3+3) |
|-----|--|--|-------|
| 18. | Sketch the flow diagram in dry process of manufacture cement | | (6) |
| 19. | What are the essential features of English bond? | • • | (6) |
| 20. | Compare brick masonry and stone masonry? | 5 10 10 10 10 10 10 10 10 10 10 10 10 10 | (6) |

Part D

Answer Any 4 questions. Each question carries 7 marks

| 21. | (a) What is meant by seasoning of timber? | | (2) |
|-----|--|-----|-----|
| | (b) Explain three different methods of seasoning. | | (5) |
| 22. | Discuss any seven defects occurring in timber. | ÷, | (7) |
| 23. | Sketch and explain any three structural steel sections | | (7) |
| 24. | What are the different flooring materials and factors affecting its selection? | 27 | (7) |
| 25. | List out seven advantages and disadvantages of flat roof. | e v | (7) |