

1311

April 2025

Time - Three hours
(Maximum Marks: 100)

- [N.B.]
1. Answer any fifteen questions under Part-A. All questions carry equal marks. (15X2=30)
 2. Answer all questions, choosing any two sub-divisions from each question under Part-B. All questions carry equal marks. (5X14=70)(7+7)

PART- A

1. Define mortar.
2. What are the general uses of timber in construction?
3. Write the properties of Brick.
4. Define FRP.
5. Draw the symbols for Brick and Staircase.
6. List out the types of rooms.
7. Define built up area.
8. What is plot coverage?
9. Define foundation.
10. List the types of bond in brick masonry.
11. What are the types of floors?
12. List the types of painting.
13. Write the principles of surveying.
14. Write short notes on contour survey.
15. Name any two instruments used for angular measurement.
16. Define GPS.
17. What is rainwater harvesting?
18. What are the advantages of mass transportation systems?
19. Write short notes about energy efficient buildings.
20. What is smart city?

[Turn over...

PART- B

21.
 - (a) Discuss the scope and role of a civil engineer.
 - (b) Explain the properties of concrete used in construction.
 - (c) Explain about optical fiber and bitumen.

22.
 - (a) Explain about classification of building conventions.
 - (b) Explain about floor space index (FSI) and its requirements.
 - (c) Discuss about the requirements of public buildings.

23.
 - (a) Write about any three types of shallow foundation.
 - (b) Discuss about the flooring materials and its types.
 - (c) Explain about objectives of plastering with its uses.

24.
 - (a) Explain about chain survey on plane ground.
 - (b) Differentiate prismatic compass from surveyor compass.
 - (c) Explain the various methods of leveling.

25.
 - (a) Discuss about the Bus Rapid Transit System (BRTS).
 - (b) Explain about the features of smart city.
 - (c) Explain about heritage structures and their conservation.
