# Register No.:

## April 2024

## <u>Time - Three hours</u> (Maximum Marks: 100)

[N.B. 1. Answer any fifteen questions under Part-A. All auestions 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 Concrete.
- 2. What are the general uses of cement in construction?
- 3. Write the uses of Fly ash.
- 4. Define FRP.
- 5. Draw the symbol for Brick and Staircase.
- 6. Define FSI.
- 7. Define Setback.
- 8. What is carpet area?
- 9. Define Foundation.
- 10. What are the types of bond in brick masonry?
- 11. What are the types of roof covering materials?
- 12. List out the different types of flooring materials.
- 13. Write the fundamental principles of surveying.
- 14. What is Local attraction?
- 15. Differentiate perpendicular offset and oblique offset.
- 16. Define GIS.
- 17. What is solid waste management?
- 18. What are the advantages of Metro Transportation System?
- 19. Write short notes about Rain Water Harvesting.
- 20. What is smart city?

[Turn over...

### PART-B

- 21. (a) What is the scope and role of Civil Engineer?
  - (b) Explain the properties of aggregates used in construction.
  - (c) Explain about steel slag and copper slag.
- 22. (a) Explain about National Building Code 2016 and its parts.
  - (b) Explain about the importance of Building bye-laws and its objectives.
  - (c) Elaborate any seven types of public buildings.
- 23. (a) Write about any three types of shallow foundation.
  - (b) Elaborate the functional requirements of the roof.
  - (c) Explain about objectives of painting with its uses.
- 24. (a) Explain about the various classifications of surveying.
  - (b) Differentiate prismatic compass from surveyor compass in detail.
  - (c) Explain about various segments in GPS surveying.
- 25. (a) Discuss about the Mass Transport system.
  - (b) Explain about Green buildings.
  - (c) Explain about the Energy efficient buildings.

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