

6624
BOARD DIPLOMA EXAMINATION
JUNE - 2019
DIPLOMA IN CIVIL ENGINEERING
ADVANCED CIVIL ENGINEERING TECHNOLOGIES
FIFTH SEMESTER EXAMINATION

Time: 3 Hours

Total Marks: 80

PART - A (3m x 10 = 30m)

Note 1: Answer all questions and each question carries 3 marks

2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences

1. List any three applications of IoT in Security
2. List any three fields of engineering in the application of IoT
3. List the types of data used in GIS
4. List any three advantages of Prestressed Concrete
5. List any three applications of geomats
6. List any three advantages of earth retaining structures
7. List any three reasons to choose precast construction method over cast in-situ method.
8. List any three types of prefabricated systems
9. Define a) Richter scale b) seismograph c) Tsunami
10. Define Solar building

PART - B (10m x 5 = 50m)

Note 1: Answer any five questions and each carries 10 marks

2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. State any ten applications of IoT in smart cities
- * 12. Explain the principle of EDM. State its uses.
13. Explain the fundamental principles of prestressed concrete
14. Explain the LeeMcall and Freyssinet system of post tensioning with necessary legible sketch
15. Explain a) Geogrids b) Geomats
- * 16. Explain the types of prefabricated systems

17. Explain the seismic resistant construction and detailing of R.C buildings as per IS:13920 code provisions
18. Explain about solar energy utilities in a) Lighting b) Water pump sets

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