

## 4712

# BOARD DIPLOMA EXAMINATION, (C-14) OCTOBER/NOVEMBER-2018 DCE- SIXTH SEMESTER EXAMINATION

### CONSTRUCTION TECHNOLOGY AND VALUATION

Time: 3 Hours ] [ Total Marks: 80

#### **PART-A**

3X10=30

Instructions:

- 1. Answer **All** questions.
- 2. Each question carries **Three** marks.
- 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1. Define workability. What are the factors influencing workability?
- 2. What are the types of admixtures? Mention any four objectives of using admixtures.
- 3. What are the methods of mix design?
- 4. What are the methods of tensioning? What is pre-tensioning systems of pre-stressed concrete?
- 5. Write any three objectives of form work.
- 6. State different types of concrete construction equipment.
- 7. State the requirements of good ventilation.
- 8. Define terms (a) Magnitude (b) Intensity (c) Energy release.
- 9. What is "sinking fund" and "Depreciation"?
- 10. What are the different methods of valuations?

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#### **PART-B**

10X5=50

### Instructions:

- 1. Answer any **Five** questions.
- 2. Each question carries ten marks.
- 3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer
- 11. (a) Explain the "Normal concrete" and "controlled concrete"
  - (b) Different types of special concretes and what are the uses of fiber reinforced concrete?
- 12. (a) What are the methods of concreting under special exposure conditions?
  - (b) What are the different types of joints in concrete? Explain construction and expansion joints with sketches.
- 13. (a) Explain the Hoyer system of pre-tensioning with neat sketch.
  - (b) Write any four advantages of pre-stressing concrete.
- 14. (a) What are the steps to be taken to reduce the cost of form work?
  - (b) What are the advantages of medium strength deformed bars?
- 15. (a) What are the factors effecting selection of equipment?
  - (b) Explain any four equipment's used for excavating of earth in construction works.
- 16. (a) What are the requirements of a good electrical wiring?
  - (b) What is the purpose of air conditioning?
- 17. (a) What are the general principles of earthquake resistant construction of buildings?
  - (b) Explain the failure of stone masonry structures during earthquake
- 18. A residential building constructed 10 years ago is situated on a plot whose total area is 400 m<sup>2</sup>. The plinth area of the building is 200 sq.m. The present cost of construction of the building is Rs. 6,50,000-00. The cost of the land is Rs. 1200 per m<sup>2</sup> the rate of depreciation for the value of the building is 1%. Calculate the total value of the property.

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