

C14-C-603

4718

BOARD DIPLOMA EXAMINATION, (C-14) OCT/NOV-2018 DCE-SIXTH SEMESTER EXAMINATION

CONSTRUCTION TECHNOLOGY AND VALUATION

Time: 3 hours | Total Marks: 80

PART—A

 $3 \times 10 = 30$

Instructions: (1) Answer **all** questions.

- (2) Each question carries three marks.
- (3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- **1.** Mention any three objectives of using admixtures in concrete.
- 2. What is meant by Fal-G concrete?
- **3.** Name any three factors which influence the workability of concrete.
- **4.** Write briefly about pretensioning system of prestressed concrete.
- **5.** What are the precautions to be taken to avoid the failure of formwork?
- **6.** Mention the purpose for which dozer is used. What are different types of dozer?

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- **7.** Mention the purpose of air conditioning.
- 8. Differentiate between magnitude and intensity of an earthquake.
- **9.** Define the terms (a) book value, and (b) scrap value.
- **10.** A building of 200 sq. mt. plinth area is situated in a plot of 400 sq. mt. The building rent is ₹2,000 per month, cost of land is ₹1,000 per sq. mt. The total outgoings are 25% of gross income. Calculate capitalized value of the building for 12% net yield. Take life of the building as 60 years.

PART—B

 $10 \times 5 = 50$

Instructions: (1) Answer any **five** questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** Explain, in detail, various factors affecting the strength of concrete.
- **12.** (a) Name different methods of curing of concrete and explain any one method in detail.
 - (b) Mention five advantages of fibre reinforced concrete.
- **13.** (a) Write five advantages of prestressed concrete.
 - (b) Explain Freyssinet system of post-tensioning.
- **14.** (a) State five functions of reinforcement in RCC.
 - (b) Mention five factors affecting the stripping time of concrete formwork.
- **15.** (a) Mention five factors affecting selection of equipment and machinery.
 - (b) Explain, in detail, the term 'dredger'.

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- **16.** What is the need for electrical earthing? Explain different types of earthing method with a neat sketch.
- **17.** Explain, in detail, the general principles that should be observed during the construction of earthquake-resistant building.
- **18.** What is depreciation? Explain any two methods of depreciation to estimate the depreciation of a property.

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