



C14-C-603

4718

BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2017

DCE—SIXTH SEMESTER EXAMINATION

CONSTRUCTION TECHNOLOGY AND VALUATION

Time : 3 hours]

[*Total Marks* : 80

PART—A

3×10=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. State any three objectives of using admixtures in concrete.
2. Define water cement ratio and state its importance in concrete.
3. Briefly explain micro concrete.
4. Define prestressed concrete.
5. State different types of steels used in RCC.
6. State various types of compaction equipment.
7. State uses of electrical earthing.
8. State any three effects of earthquakes.
9. Define (a) book value and (b) market value.
10. State three purposes of valuation.

*

PART—B

10×5=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 (a) light weight concrete and (b) high density concrete. 5+5
- 12.** Explain (a) cold weather concreting and (b) concreting in high rise buildings. 5+5
- 13.** Explain (a) Freyssinet system and (b) Magnel Blaton systems of prestressing with sketches. 5+5
- 14.** Draw the form work arrangement for (a) wall and (b) column. 5+5
- 15.** Explain (a) drug line and (b) clam shell with neat sketches. 5+5
- 16.** State requirements of (a) good lighting and (b) good ventilation in buildings. 5+5
- 17.** Explain seismic construction of RC buildings as per provisions of IS : 13920.
- 18.** A building of cost Rs. 15,00,000/- was constructed on a free hold land measuring 400 sq. m. Prevailing rate of land in the neighbourhood is Rs. 2,500/- per sq. m. Determine the rent on the property if—
- (a) the expenditure on outgoings including sinking fund is Rs. 50,000/- per annum;
- (b) the owner expects 10% return on the cost of construction and 6% on cost of land.
