



C14-C-603

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BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2018

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. Define workability.
2. Mention any three advantages of light weight concrete.
3. Write any three factors affecting the variation of concrete strength.
4. What are meant by pre-tensioning and post-tensioning in prestressed concrete?
5. List any three advantages of deformed bars compared to plain bars.
6. List any three needs for using machinery in construction.
7. List any three requirements of a good ventilation system.

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8. Define ^{*} magnitude and intensity of an earthquake.
9. Define book value and market value.
10. List any three factors governing the value of a building property.

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. (a) Define self-compacting concrete.
(b) Write any three precautions to be taken while working with self-compacting concrete.
(c) Write any five advantages of self-compacting concrete.
2+3+5=10
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12. (a) List any four types of admixture used in concrete.
(b) Explain about any two admixtures used in concrete. 2+8=10
13. (a) List any six losses in prestressing.
(b) Explain about Hoyer system of prestressing with neat sketch. 3+7=10
14. Explain the steel form work arrangement for slab and beam system with a neat sketch.
15. Draw the line diagram of Dragliner and explain its working procedure.

16. (a) ^{*}Briefly explain about ionization chamber-type smoke detector.
- (b) Briefly explain (i) fire hydrant and (ii) automatic sprinkler system. 4+6=10
17. (a) List any five factors influencing ductility in an earthquake-resistant structure.
- (b) Explain the importance of ductility in the design of earthquake-resistant structures. 3+7=10
18. (a) Explain briefly about rental method of valuation.
- (b) A residential building constructed 10 years ago is situated on a plot whose total area is 400 sq. m. The plinth area of the building is 200 sq. m. The present cost of construction of the building is ₹ 6,50,000. The cost of the land is ₹ 1,200 per sq. m. The rate of depreciation for the value of the building is 1%. Calculate the total value of the property. 3+7=10

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