

Diploma in Civil Engineering

Term-End Examination

December, 2010

01540

BCE-062 : CONSTRUCTION SUPERVISION AND BUILDING MAINTENANCE

Time : 2 hours

Maximum Marks : 70

Note : Question number 1 is compulsory. Answer any four questions out of the remaining questions.

1. Select the most appropriate answer from the given alternatives in the following multiple choice questions. 2x7=14
- (a) Upsets in timber are produced :
- (i) during seasoning.
 - (ii) due to fungi.
 - (iii) due to bad workmanship.
 - (iv) due to natural forces.
- (b) For a construction project, which out of materials, labour, equipment, time and money may be termed as resources ?
- (i) Materials, labour and time.
 - (ii) Materials and money.
 - (iii) Labour, time and money.
 - (iv) All.

- (c) Choose the correct statement.
- (i) A tender document and an agreement document is one and the same.
 - (ii) A construction supervisor need not take care of safety of workers.
 - (iii) Specifications are a part of a tender document.
 - (iv) Cast iron may be used for reinforcement bars due to its high strength.
- (d) Workability of concrete may be tested at site by :
- (i) Le Chatelier's apparatus.
 - (ii) Vicat's apparatus.
 - (iii) Compression testing machine.
 - (iv) Slump test.
- (e) In a moist environment, timber may be subjected to :
- (i) knots.
 - (ii) shakes.
 - (iii) corrosion.
 - (iv) fungi attack.

- (f) Damp proof course is generally provided :
- (i) at the lowest level of ground water table (GWT).
 - (ii) at the highest level of GWT.
 - (iii) below the plinth level.
 - (iv) above the plinth level.
- (g) Collection of quotations is needed :
- (i) for record keeping.
 - (ii) for proper workmanship at site.
 - (iii) for taking decisions regarding purchase of items.
 - (iv) for reducing accidents at site.
2. (a) Briefly explain different tasks performed by a construction supervisor. 7
- (b) What are different types of construction drawings ? Explain what information is given in each of them. 7
3. (a) Explain different steps of purchase process leading to award of purchase order. 7
- (b) What do you understand by indirect costs ? Explain briefly showing what types of expenditures are included in them. 7
4. (a) Enlist different site registers. Briefly describe any one of them. 7
- (b) Can site documentation of material accounts help in assessing the progress of a construction work ? Discuss briefly. 7

5. (a) What features should be considered while supervising a masonry work ? 7
- (b) What precautions should be taken for ensuring good workmanship of concrete construction ? Discuss briefly. 7
6. (a) What do you understand by water proofing ? What may be the problems due to dampness in buildings ? 7
- (b) Briefly describe different steps in white washing of walls. 7
7. (a) What do you understand by soil investigation ? What advantages does it offer ? 7
- (b) What are general types of defects in sanitary fittings due to prolonged use ? Explain briefly. 7
8. Write short notes any **two** of the following. **2x7=14**
- (a) Materials for repairing defects in steel.
- (b) Precautions taken during erection of form work.
- (c) Plastering of masonry walls.
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