

**DIPLOMA IN CIVIL ENGINEERING (DCLE(G))/
ADVANCED LEVEL CERTIFICATE COURSE IN
CIVIL ENGINEERING (DCLEVI/ACCLEVI)**

Term-End Examination

December, 2015

BCE-024 : CONSTRUCTION TECHNOLOGY – I

Time : 2 hours

Maximum Marks : 70

Note : *Question no. 1 is compulsory. Attempt any four questions from the remaining questions. All questions carry equal marks.*

1. Choose the correct alternative in questions (a) to (g), given below : $7 \times 2 = 14$
- (a) 'Trial pit' is a term associated with :
- (i) Beam
 - (ii) Arch
 - (iii) Flooring
 - (iv) Subsoil investigation
- (b) Which of the following transfers the load to ground soil ?
- (i) Superstructure
 - (ii) Doors
 - (iii) Arches
 - (iv) Foundation

- (c) Which of the following types of stone masonry should be considered as the best ?
- (i) Random rubble
 - (ii) Squared rubble
 - (iii) Coursed rubble
 - (iv) Ashlar
- (d) Keeping the masonry work moist for some days after construction is called
- (i) Termite proofing
 - (ii) Compacting
 - (iii) Curing
 - (iv) Cementation
- (e) Which of the following may not be considered for the stability of a reinforced concrete arch ?
- (i) Crushing of arch material
 - (ii) Sliding of wedge shaped blocks
 - (iii) Differential settlement of supports
 - (iv) All of the above
- (f) Wedge shaped unit fixed at the crown of an arch is called
- (i) Spandril
 - (ii) Haunch
 - (iii) Springer
 - (iv) Key

(g) Which of the following types of door is generally used for business purposes ?

(i) Revolving door

(ii) Sliding door

(iii) Swinging door

(iv) Rolling steel shutter door

2. (a) Draw a neat sketch of a wall footing. 7

(b) What do you understand by a deep foundation ? Draw a neat sketch of a particular type of it. 7

3. (a) What do you understand by a retaining wall ? Enlist the types of retaining walls and briefly describe any one out of these. 7

(b) Describe 24-hour immersion cold water test conducted on bricks. 7

4. (a) Describe the features of any one bond provided in brick masonry. 7

(b) Write the important points which should be checked while supervising brick masonry construction work. 7

5. (a) Describe the types of termites. 7

(b) Explain the various causes of dampness in buildings. 7

6. (a) Give the classification of lintels. Draw a neat sketch of any one type given in the classification. 7
- (b) What is the purpose of using scaffolding ? Write the names of any two types of it. 7
7. (a) Write the names of any two types of floorings used in buildings. Describe the features of any one of these. 7
- (b) Give the classification of doors. Briefly describe the features of any one type considered in the given classification. 7
8. Write short notes on any **two** of the following : $2 \times 7 = 14$
- (a) Windows
- (b) Block Masonry
- (c) Glass and Glazing
- (d) Fixtures for Doors
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