

**DIPLOMA IN CIVIL ENGINEERING
DCLEVI/ACCLEVI**

01205

Term-End Examination

June, 2012

BCE-024 : CONSTRUCTION TECHNOLOGY-I

Time : 2 hours

Maximum Marks : 70

Note : Question no. 1 is compulsory. Attempt any four more questions out of questions number 2 to 7. All questions carry equal marks.

1. Choose the correct alternative : **7x2=14**

(a) The width of foundation is calculated as :

(i) $2T + 2j$

(ii) $2T - 2j$

(iii) $2T / 2j$

(iv) None of the above

(b) The wall which helps in maintaining the surface of the ground at different elevations on either side is called :

(i) Retaining wall

(ii) Cavity wall

(iii) Partition wall

(iv) None of the above

- (c) In the scaffolding the diagonal members which are fixed on the standards are called :
- (i) Braces
 - (ii) Ledgers
 - (iii) Putlogs
 - (iv) None of the above
- (d) The process of keeping brick work wet on all exposed faces for a minimum period of seven days is called :
- (i) Scaffolding
 - (ii) Curing
 - (iii) Cutting
 - (iv) None of the above
- (e) The piles that protect water front structures against impact from ships are called :
- (i) Uplift piles
 - (ii) Fender piles
 - (iii) Batter piles
 - (iv) Compaction piles
- (f) The end support of an arch is called :
- (i) Soffit
 - (ii) Pier
 - (iii) Abutment
 - (iv) None of the above
- (g) The nominal size of modular brick is :
- (i) 22.5 cm × 11.5 cm × 7.5 cm
 - (ii) 18 cm × 8 cm × 8 cm
 - (iii) 19 cm × 9 cm × 9 cm
 - (iv) 20 cm × 10 cm × 10 cm

2. (a) Describe the various causes of settlement of foundations. 7
(b) Discuss under - reamed piles with sketches. 7
3. (a) Describe the various tests to be carried out to ascertain the quality of bricks. 7
(b) Enlist the types of stone masonry. What is a bond stone and what is its purpose ? 7
4. (a) Discuss the relative merits of lintels over the arches. 7
(b) Explain briefly the methods of damp proofing. 7
5. (a) Discuss the various factors affecting the selection of ground floorings (wearing surfaces). 7
(b) Explain the construction of terrazzo flooring and mosaic flooring. 7
6. (a) Explain the essentials of termite proofing. 7
(b) Enlist the characteristics of an ideal damp proofing material. 7
7. (a) What is a spring hinge and when is it used in the doors ? 7
(b) Draw the sketches of Rolling door and panelled door. 7
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