

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

**Term-End Examination**

00161

**June, 2015**

**BCE-024 : CONSTRUCTION TECHNOLOGY – I**

*Time : 2 hours*

*Maximum Marks : 70*

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

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1. Choose the correct alternative : 7×2=14

(a) The maximum net intensity of loading that can be imposed on the soil with no possibility of excessive settlement is

- (i) Ultimate bearing capacity
- (ii) Allowable bearing capacity
- (iii) Safe bearing capacity
- (iv) None of the above

(b) The provisions made to prevent the entry of damp into a building are known as

- (i) DPC
- (ii) OPC
- (iii) RCC
- (iv) PCC

- (c) The upper or external curve of an arch is known as
- (i) Intrados
  - (ii) Soffit
  - (iii) Extrados
  - (iv) Crown
- (d) The depression on the top face of a brick provided to form a key for holding the mortar is called as
- (i) Fog
  - (ii) Header
  - (iii) Stretcher
  - (iv) Frog
- (e) The process of keeping brickwork wet on all exposed faces for a minimum period of seven days is called as
- (i) Curing
  - (ii) Cutting
  - (iii) Scaffolding
  - (iv) None of the above
- (f) The horizontal dividing member in a window or door frame is known as
- (i) Jamb
  - (ii) Louver
  - (iii) Threshold
  - (iv) Transom

- (g) The process of forcing cement slurry under pressure into the cracks, voids, etc. present in the structure is called as
- (i) Washing
  - (ii) Grouting
  - (iii) Damp proofing
  - (iv) Water proofing
2. (a) Explain under-reamed piles with a sketch. 7
- (b) Describe end bearing pile and friction pile with sketches. 7
3. (a) Describe the various tests to be carried out to ascertain the quality of bricks. 7
- (b) Explain the types of stone masonry. 7
4. (a) Describe pre-construction anti-termite treatment. 7
- (b) What are the requirements of an ideal damp proofing material? 7
5. (a) Explain the details of an RCC lintel. 7
- (b) What are the functions of arches? State the relative merits of lintels over the arches. 7
6. (a) Explain the factors affecting selection of ground floorings or wearing surfaces. 7
- (b) Describe brick jack arch flooring with a labelled sketch. 7

7. (a) What are the various features to be considered while locating a door? 7
- (b) Describe the various types of glasses used in the construction of doors and windows. 7
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