

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

**Term-End Examination**

**December, 2016**

**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 8. All questions carry equal marks.*

1. Choose the correct alternative from the given options.  $7 \times 2 = 14$

(a) A Grillage foundation

(i) is provided for heavily loaded isolated columns

(ii) is treated as spread foundation

(iii) consists of two sets of perpendicularly placed steel beams

(iv) All the above

- (b) A depression on the top face of a brick provided to form a key for holding the mortar is known as
- (i) Cornice
  - (ii) Quoin
  - (iii) Frog
  - (iv) Closer
- (c) The best location for DPC in case of buildings without basement lies at
- (i) Ground level
  - (ii) 15 cm above the ground level
  - (iii) 1 m above the ground level
  - (iv) Plinth level
- (d) The highest part of extrados of an arch is called
- (i) Crown
  - (ii) Key
  - (iii) Arcade
  - (iv) Haunch
- (e) The type of ground flooring which is perfectly noiseless is known as
- (i) Glass Flooring
  - (ii) Cork Flooring
  - (iii) Terrazzo Flooring
  - (iv) Mosaic

- (f) The type of window provided on the sloping side of a pitched roof is called
- (i) Gable window
  - (ii) Bay window
  - (iii) Dormer window
  - (iv) Corner window
- (g) The process of keeping brick-work wet on all exposed faces is called
- (i) Chasing
  - (ii) Cutting
  - (iii) Scaffolding
  - (iv) Curing

2. (a) Explain the design of wall footing. 7
- (b) Describe the various types of foundations with the help of a systematic diagram. 7
3. (a) Explain the different parts of a building structure. 7
- (b) Explain the different functions served by cavity wall in a building. 7
4. (a) Discuss the various effects caused due to dampness. 7
- (b) Describe post-construction anti-termite treatment. 7

5. (a) What do you mean by lintel ? Explain the various functions served by it. 7
- (b) Explain the various elements of an arch with the help of a neat sketch. 7
6. (a) Define floors. Also explain its components. 7
- (b) Explain the construction of cement concrete ground flooring. 7
7. (a) Describe the types of windows in a room. 7
- (b) Classify doors based on working operations. 7
8. Write short notes on the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) Pile Foundation
- (b) Reinforced Brick-work
- (c) Scaffolding
- (d) Settlement of Foundations
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