

**DIPLOMA IN CIVIL ENGINEERING
DCLE(G) / DCLEVI**

Term-End Examination

December, 2015

BCE-043 : CONSTRUCTION TECHNOLOGY – II

Time : 2 hours

Maximum Marks : 70

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

1. Choose the correct alternatives in the multiple choice questions (a) to (g) given below : $7 \times 2 = 14$
- (a) Which test may not be carried out for bricks ?
- (i) Compressive strength
 - (ii) Water absorption
 - (iii) Efflorescence
 - (iv) Flakiness index
- (b) Initial setting time test is conducted for
- (i) Sand
 - (ii) Tricks
 - (iii) Cement
 - (iv) Lime

- (c) Slump test is connected with the determination of
- (i) Specific gravity
 - (ii) Strength
 - (iii) Workability
 - (iv) Water absorption
- (d) Fire load is divided into
- (i) Three categories
 - (ii) Two categories
 - (iii) Four categories
 - (iv) Five categories
- (e) How many types of fire extinguishers are used in different fire environments ?
- (i) Two
 - (ii) Three
 - (iii) Four
 - (iv) Five
- (f) Number of cycles (of vibration) per second is the unit of
- (i) Intensity of sound
 - (ii) Tone of sound
 - (iii) Frequency of sound
 - (iv) Strength of a welded connection

- (g) Reverberation may be considered as
- (i) An acoustical defect
 - (ii) Bad quality of bricks
 - (iii) Important in setting of cement
 - (iv) An indicator to suggest fire load for a building
2. (a) Discuss briefly the aims of supervision during a construction work. 7
- (b) Explain why various tests are conducted on construction materials. Describe any one such test in brief. 7
3. (a) What do you understand by fire prevention in a building? 7
- (b) Enlist any four structural shapes in which rolled steel sections are available. Provide neat line diagrams of all of them. 7
4. (a) Describe a 'Butt joint', with a neat sketch, for the case of a steel riveted connection. 7
- (b) What do you understand by 'Dead Spots' in the case of acoustics in a building? 7
5. (a) Describe briefly any one method of sound insulation of a building. 7
- (b) What do you understand by 'Natural Ventilation System'? Explain briefly. 7

6. (a) Enlist the types of concrete mixers. Write a short note about any one of them. 7
- (b) Write some safety measures taken with regard to the use of an equipment at a construction site. 7
7. (a) What do you understand by pre-fabrication in construction ? Give the advantages associated with it. 7
- (b) Discuss any ground improvement technique for the foundation of a building structure. 7
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