

**DIPLOMA IN CIVIL ENGINEERING**

**Term-End Examination**

**June, 2012**

**BCE-043 : CONSTRUCTION TECHNOLOGY-II**

*Time : 2 hours*

*Maximum Marks : 70*

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

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1. Choose the correct alternative : **2x7=14**
- (a) Class 'A' fire involves
    - (i) Gases
    - (ii) Liquids
    - (iii) Solids
    - (iv) All these
  - (b) A section is designated as ISJB. It is :
    - (i) BIS prescribed joist beam
    - (ii) BIS prescribed junior beam
    - (iii) BIS prescribed jointed beam
    - (iv) None of these
  - (c) Sound velocity through brick and concrete is about :
    - (i) 340 m/s
    - (ii) 4000 m/s
    - (iii) 40 to 150 m/s
    - (iv) None of these

- (d) Acceptable noise level in dB for residential building is :
    - (i) 25 to 30
    - (ii) 45 to 55
    - (iii) 60 to 65
    - (iv) None of these
  - (e) Sheep foot roller is used for compaction of :
    - (i) Sandy soil
    - (ii) Clayey soil
    - (iii) Silty soil
    - (iv) Crushed aggregate
  - (f) Additive used for quick setting of concrete is :
    - (i) Retarder
    - (ii) Water reducer
    - (iii) Accelerator
    - (iv) All these
  - (g) Under-reamed piles are suitable for :
    - (i) Transmission towers
    - (ii) Multi-storied buildings
    - (iii) Flyovers
    - (iv) All the above
2. (a) What do you understand by supervision during construction ? 7
- (b) Explain about any two documents which are maintained at site by a J.E. 7

3. (a) What are the steps for planning annual maintenance of MES assets ? 7
- (b) What role can a user play in the maintenance of a building ? 7
4. (a) What do you understand by fire protection / proofing of a building ? 7
- (b) Briefly describe fire resisting properties of (i) Concrete (ii) Steel. 7
5. Write a detailed note on acoustical defects in a building and commonly adopted methods of removing them. 14
6. (a) Explain riveted connections with neat sketches. 7
- (b) Describe in brief the artificial methods of ventilation of a building 7
7. Write short notes on *any four* of the following : 4x3½=14
- (a) Raising standard of construction work
- (b) Safety measures in construction work
- (c) Hot mix plant
- (d) Modular bricks
- (e) Precast framed construction
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