

00562

**DIPLOMA IN CIVIL ENGINEERING**

**Term-End Examination**

**December, 2011**

**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) CPM Stands for
    - (i) Critical Path Method
    - (ii) Construction Path Method
    - (iii) Control Path Method
    - (iv) None of these
  - (b) Low fire load is
    - (i) Less than  $1.15 \times 10^6$  kJ/m<sup>2</sup>
    - (ii)  $1.15 \times 10^6$  to  $2.30 \times 10^6$  kJ/m<sup>2</sup>
    - (iii)  $2.30 \times 10^6$  to  $4.60 \times 10^6$  kJ/m<sup>2</sup>
    - (iv) None of these
  - (c) Steel is strong in
    - (i) Tension
    - (ii) Compression
    - (iii) Neither (i) nor (ii)
    - (iv) Both (i) and (ii)

- (d) Acoustics is
  - (i) Science of temperature
  - (ii) Science of ventilation
  - (iii) Science of sound
  - (iv) None of these
- (e) Acceptable noise level in dB for schools/hospitals/small offices is
  - (i) 25 to 30
  - (ii) 40 to 45
  - (iii) 50 to 60
  - (iv) None of these
- (f) Minimum rate of fresh air supply for bed room and drawing room is
  - (i)  $100 \text{ m}^3 / \text{person/hr.}$
  - (ii)  $50 \text{ m}^3 / \text{person/hr.}$
  - (iii)  $30 \text{ m}^3 / \text{person/hr.}$
  - (iv) None of these
- (g) Jaw crushers are best for
  - (i) Primary crushing
  - (ii) Secondary crushing
  - (iii) Both (i) and (ii)
  - (iv) None of these

- 2. (a) What is supervision ? What are its aims ? 7
- (b) What is the aim of maintaining buildings ? 7

3. (a) What are the constraints in the maintenance of buildings ? 7  
(b) Explain fire grading of materials. 7
  4. Describe usual steel sections used as : 14  
(a) Compression members  
(b) Tension members  
(c) Flexural members giving suitable sketches.
  5. (a) Explain briefly any two characteristics of a good audible sound. 7  
(b) Describe briefly the requirements of a good ventilation system of a building. 7
  6. (a) List the various types of crushers. Explain any two. 7  
(b) Discuss any two ground improvement techniques for foundation. 7
  7. Write short notes on *any four* of the following :  
(a) Measurement Book 4x3½=14  
(b) Fire load  
(c) Built up steel sections  
(d) Sheepfoot rollers  
(e) Site organisation
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