

00961

No. of Printed Pages : 4

BICEE-005

**DIPLOMA IN CIVIL ENGINEERING
(DCLEVI / DELVI)**

Term-End Examination

December, 2015

**BICEE-005 : CONSTRUCTION SUPERVISION AND
BUILDING MAINTENANCE**

Time : 2 hours

Maximum Marks : 70

Note : Question no. 1 is compulsory. Attempt four more questions from the remaining questions no. 2 to 8. Use of scientific calculator is permitted.

1. Choose the correct answer in the following questions : $7 \times 2 = 14$

(a) In R.C.C. structures, swelling will occur due to

- (i) Excessive loading
- (ii) Excessive stresses
- (iii) Alkali-aggregate reaction
- (iv) None of the above

(b) A contract must contain certain essential facts like

- (i) Lawful subject matter
- (ii) Legally competent parties
- (iii) Both (i) and (ii)
- (iv) Neither (i) nor (ii)

- (c) Requirement of a good mortar for masonry is to obtain
- (i) Strength
 - (ii) Workability
 - (iii) High drying shrinkage
 - (iv) Only (i) and (ii)
- (d) Legislation in construction industry is necessary for
- (i) Fixing the terms of employment and working conditions
 - (ii) Providing social security
 - (iii) Maintaining cordial relationship between the employers and employees
 - (iv) All of the above
- (e) The responsibility for safety in a construction project is to be exercised by
- (i) The Contractor
 - (ii) The Client/Owner
 - (iii) Workers and equipment manufacturers
 - (iv) All of the above
- (f) Plastering is a process, which is done on
- (i) Foundation
 - (ii) Brick-wall
 - (iii) Floor
 - (iv) All of the above

- (g) In steel structures, failure by fatigue may occur due to
- (i) Sudden shock and impact loads
 - (ii) Loose connections and fluctuating loads
 - (iii) Improper rivets or bolts
 - (iv) Overloading

2. What are the different estimations done at various stages of a construction project ? Bring out the importance of 'Estimation for Variations' in the overall time and cost management of the project. 14
3. Write a brief note on the following : 2×7=14
- (a) Bill of Quantities (BOQ)
 - (b) Conditions of Contract
4. Discuss the importance of measurement books and muster rolls in construction. 14
5. What is meant by site register ? Mention any four registers used in site management and discuss their applications in Construction Management. 14

6. Make a detailed classification of cracks on the basis of various causes and factors that lead to cracks. 14

7. What is meant by preservation of timber ? Describe the various methods adopted for the preservation of timber. 14

8. Write short notes on any *four* of the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Defects in bath fitting
 - (b) Defects in sewer lines
 - (c) Corrosion in concrete
 - (d) Anti-termite treatment
 - (e) Soil investigations
 - (f) Defects in brick masonry
-