

DCLEVI, DELVI
DIPLOMA ENGINEERING

Term-End Examination

June, 2013

BICEE-005 : CONSTRUCTION SUPERVISION AND
BUILDING MAINTENANCE

Time : 2 hours

Maximum Marks : 70

Note : Question no.1 is *compulsory*. Attempt *four* more from
the remaining. Use of scientific calculator is *permitted*.

1. Choose the correct answer in the following questions. 7x2=14
- (a) 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)
- (b) The construction management is necessary for the purpose of :
- (i) Co-ordination between different agencies
 - (ii) Economy in construction
 - (iii) Speed of construction
 - (iv) All the above

- (c) Requirement of a good mortar for masonry are :
- (i) strength
 - (ii) workability
 - (iii) high drying shrinkage
 - (iv) only (i) and (ii)
- (d) Coating of a vitreous substance over a surface is known as :
- (i) Glazing (ii) Plastering
 - (iii) Distemper (iv) Painting
- (e) What kind of estimate is revised estimate, on revised quantities and rate of items ?
- (i) Approximate (ii) Detailed
 - (iii) Abstract (iv) None
- (f) Plastering is a process, which is done on :
- (i) Foundation (ii) Brick - wall
 - (iii) Floor (iv) None
- (g) A complete estimate is prepared after adding an estimated cost of all items (like land, legal expense, architect fee, etc). of the project to :
- (i) Detailed estimate
 - (ii) Revised estimate
 - (iii) Abstract estimate
 - (iv) Supplementary estimate

2. What are the different estimations done at subsequent stages of the construction project ? Bring out the importance of 'Estimation for Variations' in the overall time and cost management of the project. 14
3. Write short note on **any two** of the followings : 2x7=14
- (a) Bill of quantities
 - (b) Muster roll
 - (c) Anti-termite treatment
4. Make an assessment, in regard to issues related to workmanship in the construction activities and give some suggestions to assure quality in regard to workmanship. 14
5. What are the general defects in Brick Masonry ? Give an account of methods employed to improve the strength of Brick Masonry. 14
6. Explain briefly the different types of steel reinforcement with their usage in different types of construction activities. 14
7. Make a detailed classification of cracks on the basis of various causes and factors that develop cracks. 14
8. Differentiate between reinforced concrete and prestressed concrete and bring out the advantages and disadvantages of prestressed concrete. 14
