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BICEE-005

## DIPLOMA IN CIVIL ENGINEERING (DCLEVI / DELVI)

**Term-End Examination** 

00565

December, 2014

BICEE-005 : CONSTRUCTION SUPERVISION AND BUILDING MAINTENANCE

Time: 2 hours

Maximum Marks: 70

Note: Question No. 1 is compulsory. Attempt any six questions from the remaining. Assume any suitable data, if missing. All questions carry equal marks.

- **1.** Select the correct answer from the following:  $5 \times 2 = 10$ 
  - (a) Which of the following trees yield hard wood:
    - (i) Deodar
    - (ii) Chir
    - (iii) Shishum
    - (iv) Pine
  - (b) The disease of dry rot in timber is caused by
    - (i) lack of ventilation
    - (ii) alternate wet and dry conditions
    - (iii) complete submergence in water
    - (iv) None of the above

(c) Workability of concrete is directly proportional to (i) aggregate cement ratio (ii) time of transit (iii) grading of the aggregate (iv) All of the above To minimise the effect of differential (d) settlement, the area of a footing should be designed for (i) dead load only (ii) dead load + live load (iii) dead load + fraction of live load (iv) live load + fraction of dead load The partial safety factor for steel as per (e) IS - 456 is taken as (i) 1.15 (ii) 1.35 (iii) 1.50 (iv) 1.65Briefly describe the various steps in estimating for Planning and Scheduling of a construction project. 10 Describe the importance of Muster Rolls and Measurement Books in construction. 10 Briefly describe work supervision check lists for foundation in construction. 10 BICEE-005 2

2.

3.

4.

5.	Describe the various defects in timber and methods of preservation of timber.	9
6.	Briefly describe the types of cracks and its causes.	9
7.	Briefly describe the procedures of identifying corrosive environment and active corrosion in concrete.	0
8.	Briefly describe about water-proofing, white-washing and distemper.	9
9.	Write short notes on any ${\it two}$ of the following : $2 \times 5 = 10$	0
	(a) Cracks in Brick works/Plaster	
	(b) Fire Resistance of Timber	
	(c) Site Instructions	
	(d) POL Consumption Accounting	

