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BCE-024

DIPLOMA IN CIVIL ENGINEERING (DCLE(G))/ ADVANCED LEVEL CERTIFICATE COURSE IN CIVIL ENGINEERING (DCLEVI/ACCLEVI)

Term-End Examination

00435

December, 2014

BCE-024 : CONSTRUCTION TECHNOLOGY - I

Time: 2 hours

Maximum Marks: 70

Note: Question no. 1 is compulsory. Attempt any four more questions out of questions no. 2 to 7. All questions carry equal marks.

1. Choose the correct alternative:

 $7 \times 2 = 14$

- (a) The overhang of the pile cap beyond the outer pile is
 - (i) 100 to 150 mm
 - (ii) 200 to 250 mm
 - (iii) 50 to 100 mm
 - (iv) None of the above
- (b) In the scaffolding the vertical members of the framework, supported on the ground or drums or embedded into the ground are called as
 - (i) Standards
 - (ii) Ledgers
 - (iii) Braces
 - (iv) Putlogs

- (c) The wall which subdivides the space inside a building into rooms to serve different functions is known as
 - (i) Cavity wall
 - (ii) Partition wall
 - (iii) Retaining wall
 - (iv) None of the above
- (d) A curved-triangular space formed between the extrados and the horizontal line through the crown is called as
 - (i) Spandril
 - (ii) Skew back
 - (iii) Pringer
 - (iv) None of the above
- (e) The piles that protect waterfront structures against impact from ships are called as
 - (i) Fender piles
 - (ii) Uplift piles
 - (iii) Friction piles
 - (iv) Batter piles
- (f) The nominal size of modular brick is
 - (i) $20 \text{ cm} \times 10 \text{ cm} \times 10 \text{ cm}$
 - (ii) $18 \text{ cm} \times 8 \text{ cm} \times 8 \text{ cm}$
 - (iii) $19 \text{ cm} \times 9 \text{ cm} \times 9 \text{ cm}$
 - (iv) None of the above

	(g)	The window which projects outward from the face line of the wall is called as	
		(i) Dormer window	
		(ii) Bay window	
		· · · · · · · · · · · · · · · · · · ·	
		(iv) Sky lights	
2.	(a)	Differentiate between end bearing and friction piles.	7
	(b)	Explain the design of a wall footing.	7
3.	(a)	Describe the functions served by cavity wall in a building.	7
	(b)	Explain bonds in brick work.	7
4.	(a)	Describe scaffolding with sketches.	7
	(b)	Explain the methods of damp proofing.	7
5.	(a)	Describe the construction of terrazzo flooring and mosaic flooring.	7
	(b)	Explain the various functions served by an arch.	7
6.	(a)	Explain the essentials of termite proofing.	7
	(b)	Discuss the factors affecting the selection of upper floors.	7
7.	(a)	Discuss the points to be considered while making provisions for windows in a room.	7
	(b)	Discuss the commonly used sizes of doors in various types of buildings.	7