## B.E. Civil Engineering Fourth Semester **CE406 - Building Material & Construction**

P. Pages : 2 Time : Three Hours			GUG/W/18/1538 Max. Marks : 80	
	Note	tes: 1. All questions carry equal marks. 2. All questions are compulsory.		
1.	a)	How do you decide that a foundation is shallow or deep? Enlist various shafoundation and explain any one in detail?	llow 8	3
	b)	Design a wall foundation for a brick wall of 30cm thick and 3.2 m high about The wall carries a superimposed load of 110 kN/m run. The soil has unkN/m³, Angle of repose of 25° and safe bearing capacity of 160 kN/m³. The have lime concrete base which has unit weight of 20 kN/m³ and modulus to 160 kN/m². Take unit wt. of masonry as 20 kN/m³. Draw the designed for	it weight of 18 The footing may of rupture equal	3
		OR		
2.	a)	What do you mean by "Bearing capacity" of soil. Describe any one method bearing capacity?	to determine 8	3
	b)	What is raft foundation? Under what circumstances it is provided.	8	3
3.	a)	Compare "Brick Masonry" with "Stone Masonry".	5	5
	b)	Draw a typical plan showing alternate courses of 1½ brick thick wall is Eng	glish bond. 6	5
	c)	Show with the help of sketches various types of cluster bricks.	5	5
		OR		
4.	a)	Draw typical sketches, showing the following, constructed of stone masons: i) Weathering ii) Throating: iii) Cornice iv) Corbel.	y. <b>4</b>	1
	b)	Classify various types of Ashlar stone masonry. Draw typical sketches same?	to illustrate the 6	5
	c)	Explain with sketches various types of joints used in ashlar stone masonry.	6	5
5.	a)	What are the different types of floor finishes?	5	5
	b)	Describe with neat sketches Quean post roof truss.	5	5
	c)	Write a note on "Terrazzo flooring".	6	5
		OR		
6.	a)	What are the function requirement of roofing material?	5	5

	b) Define pitched roof? Enlist various types of pitched roof.		
	c)	Write a note "R.C.C. flooring".	6
7.	a)	What are the different types of door? Explain any one.	8
	b)	With a neat sketch, explain i) Bay window ii) Dormer window	8
		OR	
8.	a)	What are the ideal requirement of stair-case?	8
	b)	Give a short account on planning of dog-legged staircase in public building with a free bond sketch.	8
9.	a)	What are the effects of dampers can the structure? Described any one method to prevent the defects of dampers?	7
	b)	Differentiate between plastering and pointing?	4
	c)	What are the requirements of good oil point?	5
		OR	
10.	a)	What do you understand by scaffholding? Explain double scaffholding?	8
	b)	Write a note on any two.	8
		i) Raking shores. ii) Defects in plastering.	
		iii) Underpinning iv) White washing.	

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