Seat No.	: En	Enrolment No	
	GUJARAT TECHNOLOGICAL UN BE - SEMESTER-III(New) EXAMINATION - S		
•	t Code:2130607 t Name:Building Construction	Date:27/05/2016	
-	0:30 AM to 01:00 PM	Total Marks: 70	
1.	. Attempt all questions.		
2.	. Make suitable assumptions wherever necessary.		
	. Figures to the right indicate full marks.		
Q-1	Short Questions	14	

	Short Questions		14	
1	The portion of a brick cut across the width is called			
	(a) Closer	(b)half brick		
	(c) bed	(d) bat		
2	The portion of a brick cut across the length is called			
	(a) king closer	(b) queen closer		
	(c) bat	(d) quoin		
3	The type of bond in which every course contains both headers and stretchers			
	is called			
	(a) English bond	(b) Flemish bond		
	(c) Header bond	(d) stretcher bond		
4	The type of bond in which alternate course are stretcher and header is			
	(a) English bond	(b) Flemish bond		
	(c) Header bond	(d) Stretcher bond		
5	Exposed portions of a vertical surfa	ce at right angles to the door or window		
	frame are known as			
	(a) Jambs	(b) lintels		
	(c) Reveals	(d) Soffits		
6	The vertical sides of door and window openings provided in a wall are			
	known as			
	(a) Jambs	(b) lintels		
	(c) Reveals	(d) Soffits		
7	The Filling in cavities with cement slurry is known as			
	(a) Coping	(b) Beam Filling		
	(c) Grouting	(d) Gunniting		
8	A retaining wall may be built in			
		(b) Stone Masnory		
	(c) Plane cement Concrete	(d) All of these		
9	In a Public building the stair should be located near the of			
	building			
	(a) Entrance	(b) Centre		
	(c) End	(d) Toilet		

	10	The angle which the line of nosing of the stair makes with the horizontal is called		
			(b) Filler	
			d) Pitch	
	11		the width of stair	
	11		(b) Less then	
		` / 1	(d) None of these	
	12	The Pitch of stair should never exceed	• •	
	12		(b) 25 ⁰	
			(d) 40^0	
	12			
	13	The minimum depth of foundation for	load bearing wall of building is	
		restricted to (a) 600 mm	(b) 700 mm	
		` '	(d) 900 mm	
	14		ransmit the load to the soil is known as	
	14	(a) Super Structure	(b) Plinth	
		(c) Foundation	(d) Basement	
Q-2	(a)	What are the different types of boring	` /	03
Q- <u>2</u>	(a)	what are the different types of boring	methods. Explain any one in detail	0.5
	(b)	Draw the Sketch of Stair		04
		(1) Helical Stair (2) Spiral Stair (3) Ha	alf turn geometrical stair	
		(4) Three –Quarter –Turn Stair		
	(c)	Explain various types of shallow foun	dation.	07
			OR	
	(c) Explain Methods of Improving bearing capacity of		g capacity of Soil	07
Q-3	(a)	Define the Following terms		03
•	()	(1)King Closer (2) Queen Closer (3) T	Throating	
	(b)	Draw the sketch of Window		04
		(1) Bay window (2) Clere Storey Win	dow (3) Pivoted Window	
		(4)Lantern window	e ea ca	^=
	(c)	What is composite masonary. Explain	it with neat sketch.	07
			OR	
Q-3	(a)	Classify the stairs and Explain half tu	rn stair	03
	(b)	Define (1) Flight (2 Landing (3 Nosing (4) Waist		04
	(a)	Describe and in situated Describe Construction		07
(c)		Describe cast-in-situ and Precast Cons	struction	07
Q-4	(a)	Explain about Principle and construction	ion of Green Building	03
	(b)	Draw the sketch		04
) Ashlar stone arches	
		• • • • • • • • • • • • • • • • • • • •) Bull's Eye arch	
		•	•	

	(c)	Write in brief (1) Antitermite Treatment of Building (2) Acoustical Construction	07
		OR	
Q-4	(a)	Describe about floor with sketch (1) Reinforced brick floor	03
	(b)	Draw the Sketch (1) Steel grillage foundation (2) Combined Footing (3) Strap Footing (4) Raft foundation	04
	(c)	Discuss the Problems of Foundation in black cotton soils. Describe the Preventive Measures.	07
Q-5	(a)	Explain in brief (1) Sub Surface investigation	03
	(b)	Draw the Sketch (1) Brick Jack arch Flooring (2) Concrete jack arch flooring (3) Ribbed Flooring (4) Flag stone Floor	04
	(c)	Define shoring and water pinning. Explain any one method of each OR	07
Q-5	(a)	Define the following in relation of roof (1) Ridge (2 Valley (3) Purlin	03
	(b)	Briefly Explain Damp Proofing in building	04
	(c)	Explain the methods of mixing, Placing, compacting and Curing of Concrete	07