Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER- 3 (NEW SYLLABUS)EXAMINATION- Winter- 2016

Subject	Date: 04/01/2017			
Subject Time: 10 Instruction	Fotal Marks: 70			
	Make	pt all questions. suitable assumptions wherever s to the right indicate full mar	-	
				MARKS
Q.1	1	Objective type questions Which of the foundation yo load bearing structure? (a) Strip footing (c) Box or pad footing	u will provided for exterior (b) Combine footing (d) Raft footing	14 wall of
	2	· · · · · · · · · · · · · · · · · · ·	(c) rule rootingnersed in water for 24 hours(b) 20%(d) 30%	should
	3	Nominal size of brick is (a) 190 x 90 x 90 (mm) (c) 200 x 100 x 100 (mm)		
	4	In brick masonry the bond p and stretchers in each course (a) English bond (c) Zigzag bond	produced by laying alternate e is known as (b) Flemish bond (d) Dutch bond	header
	5	The horizontal members of parallel to the wall is known (a) Standards (c) Transoms	the scaffolding, which are r as (b) Ledgers (d) Putlogs	running
	6	Which type of building m reduce the dead load on the (a) Stone block (c) Hollow blocks	naterial use for masonry w high rise building. (b) Bricks (d) Cellular-light concrete b	
	7	This a defect of plaster in v appear on the surface of plas (a) Popping (c) Peeling	which whitish crystalline sub ster is known as (b) Efflorescence (d) Flaking	stances
	8	Incline member in roof truss (a) Strut (c) Tie	s is known as (b) Post (d) Purlin	
	9	Which flooring material workshop (a) Cement Concrete (c) Epoxy floor	is more suitable for auto (b) Timber (d) Marble	motive

10	The lower most or bottom horizontal part of the window frame is known as					
	(a) Sill	(b) Reveal				
	(c) Jamb	(d) Bottom rail				
11	An Arch made up of with four centres, all located on the springing line is known as					
	(a) Florentine Arch					
	(c) Stilted Arch	(d) Venetian Arch				
12	An additional finish or moulding provided to nosing or tread to improve strength of nosing of stair is known as					
	(a) Soffit	(b) Scotia				

- 13 For X ray rooms, which plaster you will recommend to provided
 - (a) Barium plaster

(c) Riser

Q.3

(b) Asbestos marble plaster

(d) None of the above

- (d) Granite silicon plaster (c) Gypsum plaster
- 14 Which of the following is indirect cost of accident at construction site.
 - (a) Treatment of worker (b) Compensation to worker
 - (c) Lost time of worker (d) All of the above
- **Q.2** (a) Enlist different types of buildings according to National 03 Building Code. State that cement manufacture company falls under which type of building category.
 - (b) According to your opinion, which type of foundation is suitable 04 for off shore structures? Explain in brief any one of its type.
 - What do you understand by under-pinning? Explain with (c) 07 sketches Pit method for under-pinning.

OR

Which type of scaffolding you will prefer for outer side of 07 (c) external wall finishing work of building? Explain it in detail with neat sketch.

Q.3 (a) Write short note on Cavity wall. 03 (b) Explain necessity of formwork? What are the requirement of 04 good formwork?

(c) Enlist various types of bond in brick masonry? Which bond 07 you will prefer for half brick construction of partition wall. Explain English Bond in detail.

OR

- (a) Write short note on ashlar chamfered masonry. 03
 - (b) Differentiate between Traditional formwork and Modern 04 formwork.
 - What are hollow concrete blocks? Enumerate the various 07 (c) advantages of using hollow concrete blocks for construction.

Q.4 (a) Draw R.C.C lintel with weather shed with neat sketch. 03 (b) What are the types of the opening provided in buildings? 04 Explain Batten-ledged-braced doors Explain essential requirement for a good roof and selection 07 (c)

criteria for roof covering materials. Which type of roof you will recommend for Tropical climate condition. OR

(Continue.....)

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- (a) Enlist different type of doors and mention which types of doors 03 **Q.4** can be used in lifts. For Industrial workshop lift which type of door you will recommend.
 - (b) Draw a neat sketch of a typical arch and show in it various 04 technical terms used in its construction.
 - Discuss various factors affecting the selection of flooring 07 (c) material? Give your recommendation for flooring to be provided for an Industrial building.
- (a) Define mortar. Enlist different type of mortar used for 03 Q.5 plastering work. State that which type of plaster you will recommend for use in fire proofing and ornamental plaster work.
 - (b) Which type of protecting coating you will recommend for 04 wooden surface of the furniture? Explain its objectives.
 - State requirements of a good stair case in brief and explain (c) 07 open well stair.

OR

Q.5	(a)	Write a short note on the causes of dampness in the structure.			
	(b)	What are the basic characteristics of an ideal paint?	04		

- (b) What are the basic characteristics of an ideal paint?
- How will you ensure the safety of construction worker on 07 (c) construction site?
