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Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER - VI (NEW).EXAMINATION - WINTER 2016

			26/10/2016	
1	l'ime:	ect Name: Refractories – I : 10:30 AM to 01:00 PM Total Marks: etions:	70	
•	iisti uc	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 		
Q.1	(a) (b)	Define refractoriness with example. Describe the GOST classification of refractories.	07 07	
Q.2	(a) (b)	Describe Fe- Fe ₃ C phase diagram. Describe classification of refractories based on acidity and mode of pressing. OR	07 07	
	(b)	Describe any ternary phase diagram.	07	
Q.3	(a) (b)	Describe alumina silica phase diagram. Describe synthesis of Alumina bricks in industry.	07 07	
Q.3	(a) (b)	OR Describe refining process with examples. Describe network former, intermediate and modifier with examples.	07 07	
Q.4	(a) (b)	Describe toughening process. Describe annealing process.	07 07	
Q.4	(a)	OR Describe chrome ore structure	07	
Ų.4	(a) (b)	Describe the modus operandi of glass tank furnace.	07	
Q.5	(a) (b)	Deduce the mathematical model for homogeneous nucleation Deduce the mathematical model for crystal growth.	07 07	
Q.5	(a)	OR Describe properties of chrome ore.	07	
~.	(b)	Describe alumina structure.	07	
