Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III • EXAMINATION – WINTER 2013

Subject Code: 132202 Date: 07-1			2-2013	
Subject Name: Mine Development Time: 02.30 pm - 05.00 pm Instructions: Total M		•		
	1. At 2. Ma	tempt all questions. ake suitable assumptions wherever necessary. gures to the right indicate full marks.		
Q.1	(a) (b)	What is Head gear? Describe various attachment of headgear. Explain: (1) Adit (2) Shaft (3) Incline.	07 07	
Q.2	(a) (b)	Write merits and demerits of inclined shaft. Explain various types of shaft lining.	07 07	
	(b)	OR Explain any one conventional method for vertical raise in the metal mines.	07	
Q.3	(a) (b)	Explain various blasting patterns used for drifting. Describe comparison of inclined system and shaft system.	07 07	
Q.3	(a) (b)	OR Explain shaft centering arrangement in shaft sinking with sketch. Explain: (1) Road header (2) Gathering arm conveyor.	07 07	
Q.4	(a) (b)	Explain vertical development method of raising by raise climbers. Describe trackless mucking transportation.	07 07	
Q.4 Q.4	(a) (b)	OR Explain: Rocker shovel. Explain: Side Discharge Loader.	07 07	
Q.5	(a) (b)	Describe ventilation and drainage pattern in drifting. Describe various factors affecting size, gradient and shape of drives and tunnels.	07 07	
		OR		
Q.5	(a) (b)	Explain: load haul dump machine. Write short note on long hole raising with its applicability, merits and demerits.	07 07	
