Seat No.:	Enrolment No.

		GUJARAT TECHNOLOGICAL UNIVERSITY		
Subject Code:2152206		BE - SEMESTER-V (NEW) - EXAMINATION – SUMMER 2016 ect Code:2152206 Date:11/05/201	Date:11/05/2016	
S	Subje Sime	ect Name:Underground coal Mining :02:30 PM to 05:00 PM Total Marks: 7 etions:  1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		
Q.1	(a) (b)	Explain Bord and Pillar method with neat sketch. Explain in detail drift theory of origin of coal.	07 07	
Q.2	(a) (b)	Explain the factors affecting the selection of underground coal mining methods. Explain longwall advancing method with neat sketch.  OR	07 07	
	<b>(b)</b>	Explain longwall retreating method with neat sketch.	07	
Q.3	(a) (b)	Explain panel system working of bord and pillar method. Write short note on spontaneous heating and incubation period.  OR	07 07	
Q.3	(a) (b)	Explain solid blasting? Explain continuous mining method by continuous miner and reason behind for keeping rhombus shape of pillar.	07 07	
Q.4	(a) (b)	Explain depillaring operation in bord and pillar mining.  Explain hydraulic profile and rate of stowing.  OR	07 07	
Q.4	(a) (b)	Explain pneumatic stowing and mechanical stowing.  Explain the reasons for pipe leakages in sand stowing with its remedy.	07 07	
Q.5	(a) (b)	Explain contiguous seam and its method of working.  Explain double ended ranging drum shearer.  OR	07 07	
Q.5	(a) (b)	What is stowing? Explain general arrangement of sand stowing with diagram. Describe the support system used in long wall method of mining.	07 07	

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