GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI- EXAMINATION – SUMMER 2016				
S		eate:09/05/2016		
Subject Name:Sub-Surface Environment Time: 10:30 AM to 01:00 PM Instructions: Total			Marks: 70	
	1 2	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 		
Q.1	(a) (b)	What is damp? Explain various types of damp. Describe the physiological effects of carbon monoxide in u/g mining.	07 07	
Q.2	(a) (b)	What are the component of atmosphere in underground Mine? Write a short note on Kata-thermometer. OR	07 07	
	(b)	What are the determinates of Humidity and also explain its effect in mines.	07	
Q.3	(a) (b)	What is ventilation? Described with neat sketch Natural Ventilation. Explain the different between Centrifugal fan & Axial flow fan. OR	07 07	
Q.3	(a) (b)	How fan are installed in Mines? Explain parallel and series operation of fans. Explain Booster & Auxiliary fan with diagram.	07 07	
Q.4	(a) (b)	Explain the Air locking arrangement in u/g mines. Explain Accessional and descensional Ventilation. OR	07 07	
Q.4	(a)	Explain the principal of air flow in mine. Why pressure ventilation survey necessary?	07	
0.5	(b)	Describe the Ventilation stopping, Air crossing, regulator.	07	
Q.5	(a) (b)	What are characteristic curves? Explain mine characteristic curves. Explain air-conditioning in deep coal mines. OR	07 07	
Q.5	(a) (b)	Explain splitting in underground workings. Explain neat sketch with methane drainage.	07 07	
