GUJARAT TECHNOLOGICAL UNIVERSITY

		GUJAKAT TECHNOLOGICAL UNIVER	
	BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER		
	Subject Code: 2162204 Date		Date: 01/05/2017
	Subject Name: Mine Hazards		
	Tim	e: 10:30 AM to 01:00 PM	Total Marks: 70
		uctions:	
	111501	1. Attempt all questions.	
		2. Make suitable assumptions wherever necessary.	
		3. Figures to the right indicate full marks.	
			MARKS
Q.1		Short Questions	14
Q.1	1	What is Fire?	14
	2	What is spontaneous heating?	
	3	Which materials is involving class 'A' Fire.	
	3 4	Which materials is involving class 'E' Fire.	
	5	What is incubation period?	
	5 6	What is lag of ignition?	
	7	Write down full form of B.C.F and C.T.C.	
	8	Write down the full form of Le chateller.	
	9	What is coal dust explosion?	
	10	What is working of Reduce valve in Proto mark IV apparatus?	
	11	What is Panel?	
	11	Which gas is helpless in fire mines?	
	12	Which chemical used in gas mask.	
	13 14	List out the breathing apparatus.	
Q.2	(a)	Write a short note on Accidental fires.	03
	(a) (b)	Write a short note on Rescue station.	03
	(b) (c)	Describe the classifation of fires.	07
	(C)	OR	07
	(c)	Write down the symptoms of spontaneous heating	07
Q.3	(a)	Write short note on Recovery of flooded mines	03
C ¹⁰	(b)	Write a short note on Gas mask.	04
	(c)	Explain the factors that play a major role in the inflammability of co	
		seam.	
		OR	
Q.3	(a)	Write short note on Spontaneous combustion	03
-	(b)	Describe the water blast danger & its prevention.	04
	(c)	What do you mean by spontaneous heating? Give the factor affectin	g 07
		Spontaneous heating of coal.	
Q.4	(a)	How does dust formed in mining?	03
	(b)	List out carbon monoxide detectors and explain any two.	04
	(c)	Explain the coal dust explosion as a mining hazard. OR	07
Q.4	(a)	Write short note on methane layering.	03
C	(b)	Describe stone dust barrier.	04
	(c)	Explain Coward's diagram.	07
Q.5	(a)	Write a short note on carbon dioxide extinguisher.	03
	(b)	Explain Chemical oxygen breathing apparatus.	04
	(c)	What are the radiation hazards in radioactive mining?	07

OR	
of old working.	

Q.5 (a) Explain Dewatering of old working.
(b) Explain coal dust explosion.
(c) Explain Proto-IV self contained breathing apparatus with diagram.
