Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY B. E. - SEMESTER – IV • EXAMINATION – WINTER 2012

Subject code: 142201		ode: 142201 Date: 27/12/2012	Date: 27/12/2012	
Subj	ect N	ame: Mining machinery-1		
_		30 pm - 05.00 pm Total Marks: 70	)	
	ructio	-		
	1. A 2. N	Attempt any five questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a) (b)	Explain in brief manufacturing process of wire ropes. Explain in brief the tests applied on wire.	07 07	
Q.2	(a) (b)	Write shot note on rope splicing.  Explain the purpose of recapping of a winding rope.  OR	07 07	
	<b>(b)</b>	Compare compressed air with electricity as a power.	07	
Q.3	(a) (b)	Compare stranded wire rope with non stranded wire rope.  Explain in brief preformed wire ropes.	07 07	
0.2	(-)	OR	07	
Q.3	(a) (b)	Write short note on jack hammer. List out various types of compressors used in mines.	07 07	
Q.4	(a) (b)	Explain in brief working of scraper chain conveyor.  Explain any one loop take up arranged for belt conveyor system.  OR	07 07	
Q.4	(a)	Compare mono cable with bi-cable aerial rope way.	07	
Q.4	<b>(b)</b>	Differentiate between direct rope haulage and less rope haulage.	07	
Q.5	(a) (b)	Explain in brief construction feature of a shuttle car. Write important feature of a good haulage track.	07 07	
	(~)	OR	07	
Q.5	(a) (b)	List out the methods of transport system used in mines. Write short note on exhaust trap used in diesel locomotive.	07 07	

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