Seat No.:	Enrolment No.
Deat 110	Emonited 10.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION – SUMMER 2013

•		ode: 142201 Date: 07-06-2	2013	
Subject Name: Mining Machinery-I Time: 10:30am – 01:00pm Instructions: 1. Attempt all questions.		30am – 01:00pm Total Marks	Total Marks: 70	
		Take suitable assumptions wherever necessary. Sigures to the right indicate full marks.		
Q.1	(a) (b)	What are various parameters affecting selection of wire rope? Describe it. Explain methods of Rope splicing.	07 07	
Q.2	(a) (b)	Why aerial ropeways are not commonly used in opencast mine. What is rope capping? Explain any one rope capels. OR	07 07	
	(b)	Explain different types of aerial ropeway.	07	
Q.3	(a) (b)	Explain various types of ropes used for winding & haulage. Describe Lang's lay and ordinary lay in wire rope with neat sketch.	07 07	
Q.3	(a) (b)	OR Explain various types of conveyor haulage. Explain with sketch pit top layout of tracks.	07 07	
Q.4	(a) (b)	Explain various types of locomotives used in mines. Write advantages of conveyor system over track and mine car.	07 07	
		OR		
Q.4 Q.4	(a) (b)	Explain Coned-Socket type capel. Differentiate Endless & direct rope haulage.	07 07	
Q.5	(a) (b)	Explain pipe line and distributions of compressed air used in u/g mines. Describe law profile dumpers and shuttle car and their maintenance.	07 07	
		OR		
Q.5	(a) (b)	Draw sketch of (1) Tippler (2) Direct rope haulage. What are the essential of a good haulage tracks?	07 07	
