Seat No.:	Enrolment No.
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-III • EXAMINATION – SUMMER • 2014

Subject Name: Mine Development			Date: 04-06-2014	
		.30 pm - 05.00 pm Total Marks	: 70	
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	What are the important points considered for the site location of shaft? Describe various types of shaft lining.	07 07	
Q.2	(a) (b)	Explain with the figure: ADIT, SHAFT, INCLINE & DECLINE. What are the different methods to enter in to the shaft?  OR	07 07	
	<b>(b)</b>	Explain the conventional methods of drifting.	07	
Q.3	(a) (b)	Describe various blasting patterns used for drifting. What are the benefits of trackless mining system.  OR	07 07	
Q.3	(a) (b)	Explain the importance of raise climbers for vertical development. Write a note on side discharge loader.	07 07	
Q.4	(a)	Describe the factors affecting size, gradient and shape of drivers and tunnels.	07	
	<b>(b)</b>	Explain the different types of loading machine and their specific use.  OR	07	
Q.4	(a) (b)	Explain long hole raising with its applicability, merits and demerits. Explain the term: hanging wall, footwall, orepass, level interval, pillar.	07 07	
Q.5		<ol> <li>Write note on any two:-</li> <li>Rocker Shovel.</li> <li>Load haul dump machine.</li> <li>Tunnel boring machine.</li> <li>Gathering arm loader.</li> <li>Walling Scaffold and Rider.</li> </ol>	14	

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