Seat No.:	Enrolment No.

**Subject Code: 182202** 

## GUJARAT TECHNOLOGICAL UNIVERSITY

## **BE - SEMESTER-VIII EXAMINATION - SUMMER 2016**

Date: 05/05/2016

Tiı	_	Name: Advance Mining Methods 5/05/2016 Total Marks: '	70
		Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a) (b)	Describe principles of operation and design of Power Support with sketch. Write construction features and application of Shield Support.	07 07
Q.2	(a) (b)	Explain Auger Mining method in brief.  Describe Horizon Mining method with neat and clean sketch.  OR	07 07
	<b>(b)</b>	Write different application, merits and demerits of Horizon Mining.	07
Q.3	(a) (b)	List out and explain different factors affecting Underground Coal Gasification.  Describe Hydraulic Mining in brief.	07 07
Q.3	(a)	<b>OR</b> Write application and working of Underground Coal Gasification.	07
	<b>(b)</b>	Describe different advantage and disadvantage of Hydraulic Mining.	07
Q.4	(a)	Explain various precautions to be taken while working of seams liable to spontaneous heating.	07
	<b>(b)</b>	Explain basic concept of Underwater Mining in brief.  OR	07
Q.4	(a) (b)	Describe different problems in Thin Seam Mining. Explain Thick Seam Mine working in detail.	07 07
Q.5	(a) (b)	Explain different problems in Deep Mining. Write note on Recent development in Underground Metal Mining.	07 07
Q.5	(a) (b)	OR Write note on Ore Mining by leaching. Describe Hydro Chemical and Bio Chemical methods of mining in detail.	07 07

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