Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - WINTER 2015

Subject Code:182202 Date:04/12/2015

Subject Name: Advance Mining Methods

Time: 2:30pm to 5:00pm Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	(a) (b)	Write principles of operation of power supports with neat and clean sketch. Write constructional features and application of power support.	07 07
Q.2	(a) (b)	Describe Horizon mining with neat sketch. Explain methods of drivage in Horizon Mining. OR	07 07
	(b)	List out various types of coal and explain about them.	07
Q.3	(a) (b)	Explain thick and thin seam mining in short. Write a short note on working of seams liable to spontaneous heating. OR	07 07
Q.3	(a) (b)	Explain Hydraulic Mining in brief. Write principles and advantages of Hydraulic mining method.	07 07
Q.4	(a) (b)	Explain about various problems in mining of thin seams. Explain various equipment used in thin seam extraction. OR	07 07
Q.4	(a) (b)	Describe layouts of stopes in rock burst prone mines. Explain problems regarding deep mining.	07 07
Q.5	(a) (b)	Explain Underground Coal Gasification in detail. Explain special methods of mining in detail.	07 07
Q.5	(a) (b)	OR Write a short note on recent developments in Underground metal mining. Explain ore mining by leaching in detail.	07 07
