Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–III(New) EXAMINATION – SUMMER 2016

Subject Code:2132201 **Date:31/05/2016**

Subject Name:Introduction To Mining

Time:10:30 AM to 01:00 PM **Total Marks: 70**

Instructions:

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

			MARKS
Q.1		**Short Questions**	**14**
	1	Definition of open cast mine.	
	2	Classification mining method.	
	3	Which type of machinery used in open cast mine?	
	4	Explain the name of machinery used in underground mines.	
	5	What is LOX?	
	6	Which area explosive store in open cast mine?	
	7	What is drilling?	
	8	What is exploration?	
	9	Explain neat sketch (a) Clay auger (b) Worm auger.	
	10	Explain neat sketch (a) Sludger (b) Stirrup and screw.	
	11	Write a application of opencast mine.	
	12	Write a limitation of opencast mine.	
	13	Definition of Coal types of coal.	
	14	What is misfire?	
Q.2	**(a)**	Write a short note on History of mining.	**03**
	(b)	Explain the different between opencast mine and underground mines.	**04**
	(c)	What is explosive? Explain the various types of explosive.	**07**
		OR	
	(c)	Describe the Trenching and Pitting.	**07**
Q.3	**(a)**	Explain the general concepts of Mine Development.	**03**
	(b)	Write a short note on Ripper.	**04**
	(c)	Different between Low explosive and High explosive.	**07**
		OR	
Q.3	**(a)**	Explain various purpose of drilling.	**03**
	(b)	Write a short note on manual drilling.	**04**
	(c)	Explain neat sketch with power drilling.	**07**
Q.4	**(a)**	Write a short note on blasting pattern.	**03**
	(b)	Explain neat sketch with deflection of borehole.	**04**
	(c)	Explain different loading equipment with diagram.	**07**
		OR	
Q.4	**(a)**	Write a short note on the origin of coal.	**03**
	(b)	Write a important of mining industries.	**04**
	(c)	What is blasting? Explain various types of blasting?	**07**
Q.5	**(a)**	What are the soci-economic impacts of mining?	**03**
	(b)	Write a note on drillablity of rocks.	**04**
	(c)	Explain with neat sketch a process of diamond drilling.	**07**
		OR	

Q.5	**(a)**	Explain the following Adit, incline, shaft.	**03**
	(b)	Write a short note on Permitted Explosive.	**04**
	(c)	Explain brief various methods Exploration.	**07**

****