

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2132201****Date: 05/06/2017****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 Define: Mining	
	2 List out the names of various mineral resources of Gujarat.	
	3 List out the names of various mineral resources of India.	
	4 Define: Surface Mining	
	5 What do you mean by Core Recovery?	
	6 Define: Drilling	
	7 What do you mean by Prospecting?	
	8 What do you mean by Exploration?	
	9 Define: Pitting	
	10 Define: Trenching	
	11 Define: Explosive	
	12 Give the names of Low Explosive and High Explosive.	
	13 List out the names of various loading equipments used in mines.	
	14 List out the names of various transportation equipments used in mines.	
Q.2	(a) Write note on significance of Mining Industry.	03
	(b) Write note on History of Mining in India.	04
	(c) Explain mining and their effect on surface environment. Add a note on Health and Safety in mines.	07
	OR	
	(c) Describe various Mineral Resources of Gujarat, India and World in brief.	07
Q.3	(a) Write note on elementary ideas about Surface Mining.	03
	(b) Describe various mining methods for Coal and Non-coal deposits.	04
	(c) Explain general concepts of Mine Development.	07
	OR	
Q.3	(a) Write various uses of Drilling.	03
	(b) Write note on Pitting and Trenching.	04
	(c) List out the types of drilling. Explain any one with neat and clean sketch.	07
Q.4	(a) Write note on principle of Boring.	03
	(b) Explain deflection of bore holes.	04
	(c) Describe boring and interpretation of borehole data.	07
	OR	
Q.4	(a) Write note on drill ability of rocks.	03
	(b) Write note on unit operation in drill and drilling.	04
	(c) Describe various materials are used to make an explosive with explosive properties.	07
Q.5	(a) Differentiate between Low Explosive and High Explosive.	03
	(b) Write note on unit operation in explosive and blasting.	04
	(c) Write note on Surface Blasting and Underground Blasting.	07

OR

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| Q.5 | (a) | Describe principle of Blasting. | 03 |
| | (b) | Write note on blasting initiation system. | 04 |
| | (c) | Describe various loading and transportation equipments used in mines with their application in brief. | 07 |
