Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– IV(NEW) EXAMINATION – SUMMER 2015

Subject Code:2142206 **Date:05/06/2015**

Subject Name: Surface Mine Production

Time: 10:30am-1.00pm **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)**	What is surface mining? Explain types of surface mining in brief.	**07**
	(b)	Describe the advantage and disadvantage of Open cast mining.	**07**
Q.2	**(a)**	What are the factors that affect the choice of mining method?	**07**
	(b)	How is over burden removes in open cast mining?	**07**
		OR	
	(b)	What are the major operations that take place in open cast mining?	**07**
Q.3	**(a)**	Explain the steps in ground preparation.	**07**
	(b)	Explain the different types of drilling equipment with diagram.	**07**
		OR	
Q.3	**(a)**	What are different drilling pattern? Explain in brief.	**07**
	(b)	What is blasting? Explain types of blasting in short.	**07**
Q.4	**(a)**	What are the problems faced by loading machines in different ground conditions?	**07**
	(b)	Explain different types of loaders?	**07**
		OR	
Q.4	**(a)**	Describe the types of transportation system in open cast mining.	**07**
	(b)	How drainage is managed in opencast mining?	**07**
Q.5	**(a)**	Write note on any two : 1. Mine reclamation. 2. Pipeline transportation. 3. Power Shovel. 4. Mine Benches.	**14**

****