Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII EXAMINATION – SUMMER 2016

Subject Code:172201 **Date:16/05/2016**

Subject Name:Mine Planning

Time:02:30 PM to 05:00 PM **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 mine planning? What are components of mine planning?	**07**
	(b)	Explain grade tonnage curve.	**07**
Q.2	**(a)**	Explain Taylor's mine life rules.	**07**
	(b)	What is the role of planning in mining venture?	**07**
		OR	
	(b)	Describe Parameter affecting design of haul road.	**07**
Q.3	**(a)**	Explain various types of reserve estimation.	**07**
	(b)	What is role of Feasibility study report for metallic & non metallic minerals?	**07**
		OR	
Q.3	**(a)**	Draw schematic diagram of bench define (1) Bench (2) Cut.	**07**
	(b)	What are the merit and demerit of surface mining?	**07**
Q.4	**(a)**	Define the following: (1) Mineable Reserve (2) Geological Reserve.	**07**
	(b)	Explain mine system and sub-system.	**07**
		OR	
Q.4	**(a)**	Write a short note on details Project report.	**07**
	(b)	How are mine losses determined?	**07**
Q.5	**(a)**	Explain the factors considered in dump planning?	**07**
	(b)	Which are the challenges posted in mine planning?	**07**
		OR	
Q.5	**(a)**	What is cut off grade? List out the different method for determining the cut off grade. Explain any one method.	**07**
	(b)	Write a short note on : (1) Underground mining. (2) Optimal size of mine.	**07**

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