

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2172208****Date:10/05/2019****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.

		MARKS
Q.1	(a) Brief discuss role of planning in mining ventures.	03
	(b) Write a note on reserve estimation of ore	04
	(c) How mine planning is done? Describe its components in detail.	07
Q.2	(a) Explain the term ore reserves	03
	(b) Write a note on cut of grade.	04
	(c) Explain grade tonnage curve. How it is computed?	07
	OR	
	(c) Explain in detail various method of ore reserve estimation.	07
Q.3	(a) Explain the term (i) bench height (ii) bench width (iii) slope angle	03
	(b) What are the necessary planning steps in surface mining?	04
	(c) Explain the haul road design and its importance in mine.	07
	OR	
Q.3	(a) Write a note on mining program	03
	(b) What are the parameters affecting on haul road design?	04
	(c) Determine the mine size and explain taylor's mine life rule.	07
Q.4	(a) What is berm? explain it with neat sketch	03
	(b) What are the various economical considerations in the optimization of mine design?	04
	(c) Explain the planning and scheduling of production for opencast mine.	07
	OR	
Q.4	(a) Explain: Mining system and subsystem	03
	(b) Explain: (i) stripping ratio (ii) optimal geometrical size of mine.	04
	(c) What do you mean by mining losses? How it is calculated?	07
Q.5	(a) What is mine closure?	03
	(b) Write the advantages and disadvantages of mine closure	04
	(c) Write down the different stages of mine closure plan.	07
	OR	
Q.5	(a) List functions are required for preparation of detail project report?	03
	(b) What are the purposes of feasibility report?	04
	(c) What are the points are to be considered for the preparation of feasibility report? Explain in brief all points.	07
