

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-IV (NEW) EXAMINATION – WINTER 2020****Subject Code:2142206****Date:24/02/2021****Subject Name:Surface Mine Production****Time:02:30 PM TO 04:30 PM****Total Marks:56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

			MARKS
Q.1	(a)	Define (i) Bench (ii) Bench Height (iii) Width.	03
	(b)	Write short note on Taylor's rule for life of mine.	04
	(c)	Write advantages and disadvantages of O/C mining.	07
Q.2	(a)	Definition of Explosive and types of Explosive.	03
	(b)	List out various factors influencing choice of O/C mining.	04
	(c)	Write note on system of removal of overburden	07
Q.3	(a)	Write short note on Choice of Mining Method	03
	(b)	Explain Construction of Scraper in brief.	04
	(c)	Explain the steps in Ground Preparation.	07
Q.4	(a)	What do you mean by Reclamation? What is the basic difference between reclamation and restoring?	03
	(b)	Write short note on belt conveyor system of transportation.	04
	(c)	Explain the different types of drilling equipment with diagram	07
Q.5	(a)	What is blasting? Explain types of blasting in brief.	03
	(b)	Explain different types of loaders?	04
	(c)	Describe the types of transportation system in open cast mining.	07
Q.6	(a)	Write short note on secondary blasting.	03
	(b)	Describe operation of Backhoe and Front End loader.	04
	(c)	Explain Bucket wheel excavator? With Diagram.	07
Q.7	(a)	Write short note on spreader.	03
	(b)	Write the factors influencing stability of Slopes.	04
	(c)	Describe Pipe line transpiration used in mines	07
Q.8	(a)	Write choice of factors influencing transport system	03
	(b)	Write note on Reclaimer.	04
	(c)	Write short note on (i) Power shovel (ii) Mine banches.	07