Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (NEW) EXAMINATION – WINTER 2022

Subject Code:3172210   **Date:07-01-2023**
Subject Name:Mine Mineral Economics
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.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	(a)	Explain capital cost and operating cost.	03
	(b)	How are mineral losses classified? How are these losses incorporated in	04
	(c)	Describe various functions of national mineral policy 2012.	07
Q.2	(a)	What do you understand by the term sampling and why it is important for the industry?	03
	(b)	Discuss the risky nature of the mining industry.	04
	(c)	Explain budget and budgetary control in brief.	07
		OR	
	(c)	Enumerate the different types of internal sampling errors according to Pierre Gy's theory of sampling.	07
Q.3	(a)	Write a short note on ore classification.	03
	(b)	Explain dilution and recovery.	04
	(c)	Explain conservation of mineral resources, scope and their limitations.	07
		OR	
Q.3	(a)	Enumerate the purpose of mine accounting.	03
	(b)	What are standard costs and what is its importance in decision making in an industry.	04
	(c)	Describe the different types of sampling method used in mine.	07
Q.4	(a)	What should be the ideal basic principles of mining taxation?	03
	(b)	What do you understand by ABC analysis? What are its advantages?	04
	(c)	Enumerate the different methods of calculating depreciation and compare them.	07
		OR	
Q.4	(a)	Discuss the composition and economic significance of mineral inventory.	03
	(b)	Discuss the regulatory and developmental objectives of taxation.	04
	(c)	Explain different methods for reduction of sample.	07
Q.5	(a)	State the assumption on which cost-volume-profit analysis is used.	03
	(b)	State the desirable features of depreciation methods.	04
	(c)	What do you understand by mine valuation? Explain Hoskold's and modern concepts for present value computation.	07

OR

Q.5 (a) What are the precautions to be taken during sampling? **03**

(b) Discuss the basic concept and classification of tax systems. **04**

(c) Describe the different methods of mine valuation and their application. **07**

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