Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI • EXAMINATION – WINTER 2013

Subject Code: 162205 **Date: 04-12-2013**

Subject Name: Mine Surface Environment

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)**	Explain Environmental issues in mineral industry.	**07**
	(b)	Describe ecological and sociological impacts of mine environment.	**07**
Q.2	**(a)**	What are the factors responsible for degradation of soil? Explain the reclamation of derelict Lands.	**07**
	(b)	What is demography? Explain how the mine environment affects the human population?	**07**
		OR	
	(b)	What are the requirements of landscape planning? Add a note on land capability mapping.	**07**
Q.3	**(a)**	What is acid mine drainage? Explain formation of AMD.	**07**
	(b)	What is the land use pattern? Give the assessment of impacts of land use	**07**
		OR	
Q.3	**(a)**	Explain the impacts of mining activities on surface and sub surface water bodies.	**07**
	(b)	Which environmental problems are found in contour-strip mining? Add a note on stabilizing The debris dumps in this mining operation.	**07**
Q.4	**(a)**	What is airborne repairable dust? Explain its harmful physiological effects and control.	**07**
	(b)	Explain flora and fauna impacts on mine environment.	**07**
		OR	
Q.4	**(a)**	Write a short note on environmental management in mining operation.	**07**
Q.4	**(b)**	Write a note on underground mining hazards in India.	**07**
Q.5	**(a)**	Write a note on primary causes of Fly rock.	**07**
	(b)	Explain environment aspects of air blast and ground vibration.	**07**
		OR	
Q.5	**(a)**	What are the anthropogenic changes in ecosystem? Explain with suitable example.	**07**
	(b)	How is the intensity of noise measured? In what way is a miner affected by Exposure to loud noises over long years?	**07**

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