Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII • EXAMINATION – WINTER • 2014

Subject code: 172203 **Date: 04-12-2014**

Subject Name: Environment Management in Mines

Time: 10:30 am - 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.**

Q.1	**(a)**	Draw a schematic environmental discharge model of mining project. Explain Environmental impact of mining projects on its various stages	**07**
	(b)	How can the damage to the environment be contained within acceptable limits and compensated for. Explain it.	**07**
Q.2	**(a)**	What are the potential environmental impacts of waste rocks? Explain it.	**07**
	(b)	What is tailing disposal? Explain Waste rock characterization with proper example.	**07**
		OR	
	(b)	Explain Acid Mine Drainage.	**07**
Q.3	**(a)**	Explain the active treatment technology used for acid mine drainage & its issues.	**07**
	(b)	Explain Ecological Restoration with flow chart.	**07**
Q.3	**(a)**	What is natural restoration? Elaborate restoration planning, goal & objectives?	**07**
	(b)	Explain the technologies used for acid mine drainage for wetlands.	**07**
Q.4	**(a)**	What is Sustainable Development and how this approach is applicable in mining projects.	**07**
	(b)	Describe the basic requirement during mine closure.	**07**
		OR	
Q.4	**(a)**	Explain the Management Principles for Post Mining Land use.	**07**
	(b)	State the objectives of mine closure.	**07**
Q.5	**(a)**	Explain Environment Management Plan for mines.	**07**
	(b)	Discuss briefly Environment Impact Assessment (EIA) study.	**07**
		OR	
Q.5	**(a)**	What is the procedure for getting Environment Clearance for mining project? State the conditions as stipulated in Environment Protection Act Notification 1986.	**07**
	(b)	Discuss Environment Monitoring and Management.	**07**

****