

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– VI (New) EXAMINATION – WINTER 2019

Subject Code: 2162205

Date: 09/12/2019

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.

		MARKS
Q.1	(a) How airborne dust is generated and dispersed in mining?	03
	(b) What is AMD? Which are the effects of AMD occurred in mining regions.	04
	(c) What are the air pollutants? Give the various effects of air pollution to human health and ecology.	07
Q.2	(a) Discuss the precautions are taken for prevent air pollution.	03
	(b) Discuss the impacts of mining activities on surface and sub – surface water bodies.	04
	(c) What are the major environmental incidents and effects caused by AMD?	07
	OR	
	(c) What is water drainage pattern? How the drainage pattern is affected due to mining?	07
Q.3	(a) Which minerals are responsible for generation of Acid Mine Drainage?	03
	(b) Describe ecological and sociological impacts of mine environment.	04
	(c) What is demography? Explain how the mine environment affects the human Population?	07
	OR	
Q.3	(a) How soil quality degraded due to mining?	03
	(b) Discuss the community stability and species diversity with the reference of ecological environment.	04
	(c) How noise pollution generated by mining can be reduced?	07
Q.4	(a) Write note on effect of Mining activity on Environment.	03
	(b) What is airborne repairable dust? How it is generated? Explain its harmful physiological effects and control.	04
	(c) What is blasting? Give the environmental aspects of ground vibrations and air-blast.	07
	OR	
Q.4	(a) Describe different impacts of mining activities on forests.	03
	(b) What are the impacts of open cast mining on environment?	04
	(c) Write a note on primary causes of Flyrock.	07
Q.5	(a) How water pollution can be controlled from mining activities?	03
	(b) Write a brief description on effects of mining on flora and fauna?	04
	(c) Discuss the impacts of mining activities on surface and sub – surface water bodies.	07
	OR	
Q.5	(a) How land environment can be affected by mining?	03
	(b) Explain the steps for social impact assessment in mining.	04
	(c) Which are the responsible factors for degradation of soil? Explain the reclamation of derelict and degraded lands.	07
