

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2162201****Date: 10/05/2017****Subject Name: Ecology Geology-I****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.

		MARKS
Q.1	Short Questions	14
	1 Hematite is the ore of which metal?	
	2 If granite is original rock then which rock is its metamorphic equivalent?	
	3 In india where is zinc metal mined?	
	4 Narrate the different types of coals in order of their formation.	
	5 Which type of rocks is the magmatic ore deposits closely related?	
	6 In which type of rocks, the coal seams are normally are found.	
	7 In india diamonds are mined from which place.	
	8 What are ore minerals? Give examples.	
	9 Galena is an ore of which metal.	
	10 Give the uses of corundum mineral	
	11 Which mineral deposits are formed from cooling of gaseous and liquid solutions in cavities, fissures etc?	
	12 Give the names of noble metals.	
	13 Define Tenor.	
	14 In which process of deposition of minerals, no replacement is involved?	
Q.2	(a) Discuss how the rock forming minerals are different from economic minerals.	03
	(b) What are metallic minerals, non metallic minerals and mineral field? Discuss each with suitable illustration.	04
	(c) Define (1) ore minerals (2) ore deposits (3) Gangue minerals. Add a note on mineral resource of india with special reference to Gujarat.	07
	OR	
	(c) Discuss the scope of mineral economics. Highlight the important aspects of National Mineral Policy.	07
Q.3	(a) Justify the statement – ‘‘Gujarat coast has most cement factories’’	03
	(b) Explain abrasive minerals giving their mineral composition, properties and uses.	04
	(c) Discuss the various mineral forming processes in igneous rocks.	07
	OR	
Q.3	(a) Different between intrusive and extrusive rocks.	03
	(b) Give economic classification of minerals.	04
	(c) Discuss how metamorphism is associated with ore formation.	07
Q.4	(a) Discuss the essential conditions for the formation of hydrothermal deposits.	03
	(b) Describe different forms in which the magmatic ore deposits occur.	04
	(c) Define contact metasomatism. Which minerals are associated with it.	07
	OR	
Q.4	(a) What was pegmatite deposits? Discuss.	03
	(b) Which different economic deposits are associated with acidic and basic rocks?	04
	(c) Narrate the role of intrusive and invaded rock in the formation of skarns. Highlight the characteristic of skarn deposits.	07
Q.5	(a) Give the signification of clay minerals in ceramic industry.	03
	(b) Name and describe the minerals used in fertilizer industry.	04
	(c) Give the mode of occurrence and genesis of Indian zinc deposits.	07

OR

- Q.5**
- (a) Write about chromium deposits of India. **03**
 - (b) Give the origin, geological distribution and Indian occurrences of coal **04**
 - (c) Explain the origin and mode of occurrence of diamond deposits in india. **07**
Enumerate important gemstoneS.
