

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI • EXAMINATION – SUMMER • 2014****Subject Code: 162201****Date: 19-05-2014****Subject Name: Economic Geology - I****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) Explain the Importance of minerals in national economy. **07**  
(b) Classify the deposit forming process of economic minerals. **07**
- Q.2** (a) Elaborate the importance of pegmatite rock in economic mineralogy. **07**  
(b) Explain the mineral deposits of Gujarat with reference to cement industry. **07**
- OR**
- (b) What is the mode of occurrence of economic minerals used in paint and pigment industry **07**
- Q.3** (a) Describe the hydrothermal deposits with reference to economic mineralogy. **07**  
(b) What is the significance of intrusive and invaded rocks in skarn formation? **07**
- OR**
- Q.3** (a) What is metasomatic replacement? Explain different stages and growth of replacement. **07**  
(b) What are base metals? Explain mode of occurrence and geological distribution of base metals. **07**
- Q.4** (a) What are the major and minor fertilizer minerals. **07**  
(b) Explain early and late magmatic concentration process. **07**
- OR**
- Q.4** (a) Write a note on Chrome deposits of India. **07**  
(b) Explain refractory minerals. **07**
- Q.5** (a) Write note on any two : - **14**  
1. Fissure vein saddle reefs.  
2. Crustification and comb structure.  
3. Glass and ceramic minerals.  
4. Economic deposits associated with metamorphic rocks.

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