

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-VI • EXAMINATION – WINTER 2013**

**Subject Code: 162201****Date: 27-11-2013****Subject Name: Economic Geology - I****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) What is the importance of minerals in Indian economy ? Also give economic classification of minerals. **07**
- (b) What are metallic minerals, non-metallic minerals and mineral fuel? **07**  
 Explain each with examples and its uses.
- Q.2** (a) Write a note on ore and gauge minerals. **07**
- (b) Classify mineral deposit processes. **07**
- OR**
- (b) What economic deposits are associated with acidic, basic and ultrabasic rocks **07**
- Q.3** (a) Write a note on mineral forming processes in Igneous rocks. **07**
- (b) How is metamorphism associated with ore formation. **07**
- OR**
- Q.3** (a) Association of economic minerals with pegmatites. **07**
- (b) Write a brief note on role of intrusive rocks in economic mineralogy **07**
- Q.4** (a) What is contact metasomatism? Which minerals and ores are associated with it? **07**
- (b) Write about the hydrothermal process of mineral deposits. **07**
- OR**
- Q.4** (a) Give mode of occurrence and genesis of Indian metallic deposits for Gold and Zinc **07**
- (b) Write a note on Industrial mineral deposits. **07**
- Q.5** **Write Note on (any 2)** **14**
1. Genetic classification of minerals based on “Depth – Temperature criteria.
  2. Fissure vein and saddle reefs.
  3. Cement industry of Gujarat.
  4. Gemstones.

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