

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- VIth SEMESTER-EXAMINATION – MAY- 2012****Subject code: 162201****Date: 09/05/2012****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) What is hydrothermal solution? Explain hydrothermal deposits. **07**
(b) Explain the stages and deposits of metasomatic replacement. **07**

- Q.2** (a) Explain Ladder-lodes and saddle reef deposits developed by cavity filling process. **07**
(b) Give the strategy of economic minerals for the country. **07**

OR

- (b) What are the gangue and tenor of an ore? Add a note on economical important minerals grouped according to India's mineral resources. **07**

- Q.3** (a) Give the genetic classification of mineral deposits. **07**
(b) Write a note on types of pegmatite. **07**

OR

- Q.3** (a) Explain early-magmatic deposits related to igneous activity. **07**
(b) What is the role of intrusive and invaded rocks for the formation of skarns? Add a note on characteristics and economical importance of skarn deposits. **07**

- Q.4** (a) What are the base metals? Give the mineralogy, mode of occurrence and geological distribution of base metals. **07**
(b) Give the various gold field of India. **07**

OR

- Q.4** (a) Write a note on Singbhum copper deposits with their uses. **07**
(b) What is the distinction criterion between natural stones and synthetic stones? Add a note on mode of occurrence of Diamond deposits. **07**

- Q.5** (a) What are refractories? Give the acidic refractory minerals. **07**
(b) Give the role of clays in ceramic industry. **07**

OR

- Q.5** (a) What are the abrasives? Give natural abrasive minerals. **07**
(b) Write a note on Gypsum deposits used in various industries. **07**
