

GUJARAT TECHNOLOGICAL UNIVERSITY
B E Sem-VI Examination May 2011

Subject code: 162201

Subject Name: Economic Geology – I

Date: 16/05/2011

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) List out different igneous activities responsible for ore deposits. Write a short note on Late magmatic deposits. **07**
(b) What is the scope of the study for Mineral Economics? Add a note on “National Mineral Policy”. **07**

- Q.2** (a) Give the genetic classification based on “Depth – Temperature criteria” for the different mineral deposits. **07**
(b) Which are the geophases of pegmatite for the different mineral formation within a broad range of temperatures? Explain “Types of Pegmatites”. **07**

OR

- (b) How the Skarn rocks are formed? Which are the structural factors play an important role in the formation of Skarn deposits? **07**

- Q.3** (a) What are the mineralisers? Write a short note on hydrothermal deposits. **07**
(b) Explain “Stock works” as a cavity filling deposits. **07**

OR

- Q.3** (a) What are metasomatic replacement deposits? Which are the pre-requisites for their formation? Explain different stages and growth of replacement. **07**
(b) Explain “Fissure vein and saddle reefs”. **07**

- Q.4** (a) Write a note on “Gold ore deposits of India”. **07**
(b) Write a note on Clays – used in ceramic industry. **07**

OR

- Q.4** (a) Write a note on Singbhum copper deposits of India. **07**
(b) Which are the important gemstones? Discuss the mode of occurrence, origin and uses of diamond. **07**

- Q.5** (a) Explain “Acid refractory minerals”. **07**
(b) Which are the major and minor fertilizer minerals? Explain “Potash – as a fertilizer mineral”. **07**

OR

- Q.5** (a) Explain “Basic refractory minerals”. **07**
(b) Write a note on “Chrome deposit”. **07**
