Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 162201 Date: 10/05/2017 **Subject Name: Economic 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. (a) What are metallic minerals, non-metallic minerals and metallic fuels? Explain 0.1 07 with illustrations and their uses. (b) Discuss the generic classification of mineral deposits. 07 0.2 Discuss the significance of minerals in national economy. 07 (a) **(b)** Write a detailed **07** note on ores and gangue minerals giving suitable examples. (b) Explain how metamorphism is associated with ore formation. 07 **Q.3** (a) How pegmatites are important in economic geology? Name the economic 07 minerals that are associated with pegmatites. Describe the Indian pegmatite belts. 07 **(b)** OR 0.3 (a) Describe the types of hydrothermal deposits. 07 **(b)** Describe the mineral forming processes in igneous rocks. 07 Justify the statement- Gujarat coast has the most cement plants. 0.4 07 Discuss the role of various types of clays in ceramic industries. 07 **(b)** (a) Describe the major and minor fertilizer minerals. **07** 0.4 (b) Narrate the geographic distribution, varieties, origin and uses of gypsum. **07** 0.5 (a) Explain the occurrence and genesis of Indian copper deposits. 07 **(b)** What are abrasive minerals? Discuss their classification. 07 (a) Describe the various forms of ore deposits with sketches. 07 0.5 Give the mineralogy, geographic distribution, mode of occurrence, origin and 07 **(b)** uses of chromite deposits.
