

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- VIIth SEMESTER-EXAMINATION – MAY/JUNE- 2012

Subject code: 172204

Date: 28/05/2012

Subject Name: Mineral Processing

Time: 02:30 pm – 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) Write characteristics of Jaw crusher with generalized section figure. **07**
(b) Write characteristics of Gyratory crusher with generalized section figure. **07**
- Q.2** (a) Explain Stationary screen & Vibrating screen. **07**
(b) Explain Shaking table. **07**
- OR**
- (b) Explain in brief Froth floatation process. **07**
- Q.3** (a) Explain Lessing process. **07**
(b) Write important elements of design of Magnetic separator. **07**
- OR**
- Q.3** (a) Write factors affecting rate of filtration. **07**
(b) Explain Du pont process. **07**
- Q.4** (a) Write merits of mineral processing. **07**
(b) Define sample. Write its importance. **07**
- OR**
- Q.4** (a) Explain Hindered settling, Consolidation trickling & Differential acceleration. **07**
(b) Explain any one magnetic separator with figure. **07**
- Q.5** (a) Explain Demagnetizer. **07**
(b) Explain Electrostatic separation. **07**
- OR**
- Q.5** (a) Draw simplified flow sheet for cleaning & preparation of Bituminous coal. **07**
(b) Draw simplified flow sheet for concentration of Copper Sulphide ore. **07**
