

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2172204

Date: 06/05/2017

Subject Name: Mineral Processing

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) Differentiate between Crushing and Grinding. **07**
(b) List out different types of Crushers. Explain Blake Crusher with neat sketch. **07**
- Q.2** (a) Define Mineral Processing. Explain Comminution and Liberation in detail. **07**
(b) Explain in detail different steps are considered in Mineral Processing. **07**
- OR**
- (b) Write a note on Laws of setting of solids in fluids. **07**
- Q.3** (a) Explain the Purpose of Flow Sheet in Mineral Processing with diagram. **07**
(b) Explain methods of Ore Dressing in detail. **07**
- OR**
- Q.3** (a) Draw neat and clean diagram of Flow Sheet for Bituminous Coal. **07**
(b) Write note on Thickening. **07**
- Q.4** (a) Describe Electrostatic Separation in detail. **07**
(b) Define Classification. Explain classifier with sketch. **07**
- OR**
- Q.4** (a) Explain Magnetic Separation with neat and clean sketch. **07**
(b) Write note on Jigging and Flowing. **07**
- Q.5** (a) Explain Heavy Media Separation with neat sketch. **07**
(b) Define Sample and Sampling. Explain types of samples in detail. **07**
- OR**
- Q.5** (a) Describe Froth Floatation method in brief. **07**
(b) Write a note on Coal Washing. **07**
