

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 settling 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**
