

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII(OLD) • EXAMINATION – WINTER 2016

Subject Code: 172207**Date: 18/11/2016****Subject Name: Rock Fragmentation (Department Elective - 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.

- Q.1** (a) What is a detonator? Compare plain detonator with electric detonator. **07**
(b) What are the application and uses of explosives? **07**
- Q.2** (a) Write Factors affecting rock fragmentation in blasting **07**
(b) Describe the following (1) Pop Shooting (2) Plaster Shooting & (3) Coyote Blasting. **07**
- OR**
- (b) Write a short note on Nuclear Blasting. **07**
- Q.3** (a) What is explosive? Describe in brief properties of explosive. **07**
(b) Explain the steps which are taken after a misfire. **07**
- OR**
- Q.3** (a) What is rock fragmentation? Explain the various characterize of rock fragmentation **07**
(b) Explain with a neat sketch Drag cut and Cormorant cut. **07**
- Q.4** (a) Compare rotary drilling with percussive drilling. **07**
(b) Explain with a neat sketch priming operation. **07**
- OR**
- Q.4** (a) Explain in brief the impact of ground vibration. **07**
(b) What parameters are important in drilling? **07**
- Q.5** (a) What is drilling? Explain various purpose of drilling. **07**
(b) What is ground vibration? Explain it causes and damages. **07**
- OR**
- Q.5** (a) Give difference between high explosive Vs low explosive. **07**
(b) Write the advantage and disadvantage of delay blasting technique. **07**
