

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – SUMMER • 2014

Subject Code: 172207

Date: 31-05-2014

Subject Name: Rock Fragmentation

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) What is an explosive? Explain the low explosive with gun powder. **07**
(b) Write a short note with illustrative sketch on (1) Wedge Cut & (2) Burn Cut **07**
- Q.2** (a) Explain various properties of explosives. **07**
(b) Describe the advantages of Muffled Blasting. **07**
- OR**
- Write a short note on Nuclear Blasting. **07**
- Q.3** (a) Explain in brief Rotary Percussive Drilling. **07**
(b) What are the precautions taken during the use of explosives? **07**
- OR**
- Q.3** (a) Describe the computational models of blasting with figure. **07**
(b) Describe the following (1) Pop Shooting (2) Plaster Shooting & (3) Coyote Blasting. **07**
- Q.4** (a) Explain with illustrative sketch direct initiation and indirect initiation. **07**
(b) Write the advantage and disadvantage of delay blasting technique. **07**
- OR**
- Q.4** (a) Write in brief about hang fire and Blown –out shot. **07**
(b) Describe drill-ability of rock. **07**
- Q.5** (a) What is a detonator? Compare plain detonator with electric detonator. **07**
(b) Explain the steps which are taken after a misfire. **07**
- OR**
- Q.5** (a) Write a short note on long hole drilling. **07**
(b) Explain in brief the impact of ground vibration. **07**
