Seat No.:	Enrolment No.

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

Subject Code:2172207	Date:29/11/2016

Dubject	. Couc.2172207	Dutc. 27
Subject	: Name:Rock Fragmentation(Departmental Elective	e - II)

Time: 10.30 AM to 1.00 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)	Define drilling and why it is required? Classified their types and explain power	07
	(b)	drilling. Explain Rotary drilling in detail.	07
Q.2	(a) (b)	List out different types of bits are used in drilling. Explain any four with sketch. Differentiate between Percussive Drilling and Rotary Drilling. OR	07 07
	(b)	Differentiate between Low Explosive and High Explosive.	07
Q.3	(a) (b)	Write note on Hydraulic Drilling and Long Hole Drilling. Describe various parameters of drilling optimization. OR	07 07
Q.3	(a) (b)	What is boring and why it is required? Write seven uses of boring. Explain properties of explosive in brief.	07 07
Q.4	(a) (b)	Make a list of different blasting devices and explain any two with sketch. Write note on Blow out and Blown Through shots. OR	07 07
Q.4	(a) (b)	Write note on Ground Vibration and Air Blast. Explain nuclear blasting and when it is used?	07 07
Q.5	(a)	Give the classification of detonators. Differentiate between Plain Detonator, Half Delay Detonator and High Tension Detonator	07
	(b)	Define Secondary Blasting and why it is required? Explain it with their types and neat sketch.	07
		OR	
Q.5	(a)	Write note on Novel method of Drilling.	07

(b) Define misfire. Explain the steps which are taken after misfire.

07