GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-V • EXAMINATION - WINTER • 2014 Date: 28-11-2014 Subject Code: 152202 **Subject Name: Surface Mine Production** Time: 10.30 am - 01.00 pm **Total Marks: 0 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 07 **Q.1** (a) Define the terms associated with surface mining. What are the advantages and disadvantages of open cast mining? **07 (b)** Explain the main parameters of open cast mining. **Q.2** (a) 07 What are the major operations in surface mining? **(b) 07 (b)** What is drilling? Describe different drilling pattern. 07 **Q.3** (a) Evaluate different types of drilling equipments used in mining. 07 What is blasting? Explain coyote and secondary blasting. 07 **(b)** What are the factors that affect the excavators in different conditions? 07 **Q.3** (a) Evaluate the types of transport system in open cast mining. **(b)** 07

0.4 Explain spreaders and reclaimers. 07 (a)

What is mine reclamation? Explain types of reclamation for open cast mining. **07 (b)**

OR

What are the drainage requirements in surface mining? 07 **Q.4** (a) How slope stability id protected and monitored? **(b)** 07

Write Note on any two: Q.5

1. Mechanics of slope failure.

2. Power shovel and Dragline.

3. Disposal of overburden.

4. Scrapping an Ripping.

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