

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (New) EXAMINATION – WINTER 2015

Subject Code:2142206**Date:04/01/2016****Subject Name: Surface Mine Production****Time: 2:30pm to 5:00pm****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) Write advantage and disadvantage of Surface Mining. **07**
(b) Define the terms : (1) Quarry (2) Open Cast Mining (3) Bench Height (4) Bench Width (5) Slop Angles (6) Surface Mining **07**
- Q.2** (a) Write a short note on system of disposal of overburden. **07**
(b) Write down factors influencing selection and characteristics of opencast work. **07**
- OR**
- (b) Write a short note on choice of mining methods. **07**
- Q.3** (a) Describe various operations in Surface Mining. **07**
(b) Write a short note on Bulldozing and Scrapping. **07**
- OR**
- Q.3** (a) Write a short note on Grading and Ripping. **07**
(b) Explain different types of drilling equipment. **07**
- Q.4** (a) Describe various Drilling Patterns. **07**
(b) Define Explosive. Explain Multi Row Blasting. **07**
- OR**
- Q.4** (a) Explain Secondary Blasting and Coyote Blasting. **07**
(b) Explain Bucket Wheel Excavator in brief. **07**
- Q.5** (a) Explain various transportation equipment used in open cast mines. **07**
(b) Write a short note on Spreaders and Reclaimers. **07**
- OR**
- Q.5** (a) Describe Reclamation method in brief. **07**
(b) Write down various factors influencing Stability of Slopes. **07**
