

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. Sem. – IV - Examination –June- 2011

Subject code: 142201

Subject Name: Mining Machinery-1

Date:06/06/2011

Time: 10.30 am – 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) Explain Pipe lines and Distribution of Compressed air . 07
(b) Construction details and attachments of mine tubs ? 07

Q.2 (a) Explain different types of Mine Locomotives 07
(b) Explain end less rope haulage. 07

OR

(b) Why aerial ropeways are not commonly used in o/c mine. 07

Q.3 (a) What is basic layout Direct Haulage ? Describe it with 07
figure.
(b) Differentiate Endless & direct rope haulage. 07

OR

Q.3 (a) Describe layouts of aerial ropeway used in mine. 07
(b) Various types of Aerial ropeways. 07

Q.4 (a) Criteria for selection of wire ropes. 07
(b) Explain reliance rope caples? 07

OR

Q.4 (a) Explain Coned- socket type capel. 07
(b) Explain methods of Rope splicing.. 07

Q.5 (a) Explain different types of conveyor haulage 07
(b) Describe law profile dumpers and shuttle car and their 07
maintenance.

OR

Q.5 (a) Describe Lang,s lay and ordinary lay in wire rope. 07
(b) What are the essential of a good haulage tracks ? 07
