

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER- IV(NEW) EXAMINATION – SUMMER 2015

Subject Code: 2142201**Date:30/05/2015****Subject Name: Mine machinery-I****Time:10:30am-1.00pm****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) Explain about aerial ropeway and its type. **07**
(b) Explain compressed air Vs electricity as power. **07**
- Q.2** (a) Describe rope tensioning arrangement in ropeway. **07**
(b) Write short note on SDL and LHD. **07**
- OR**
- (b) Write short note on shuttle car. **07**
- Q.3** (a) Give the name of various type of rope haulage used in underground and describes direct rope haulage. **07**
(b) Explain about gravity rope haulage. **07**
- OR**
- Q.3** (a) Give the types of conveyer? And also give the reasons for the increased use of conveyers in mining. **07**
(b) What is rope splicing? Describe in details. **07**
- Q.4** (a) Write short note on diesel locomotives. **07**
(b) What are the essentials of good haulage track to be used in mines? **07**
- OR**
- Q.4** (a) Write short note on battery locomotives. **07**
(b) Write short note on mine tubes and mine cars. **07**
- Q.5** (a) What are different types of rope use in mining? Mention their particular field of usefulness. **07**
(b) Write short note on detaching hook. **07**
- OR**
- Q.5** (a) Explain about sleepers and ballast. **07**
(b) What are different methods of transport system used in underground mine. **07**
