

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E SEM-V Examination-Nov/Dec.-2011

Subject code: 152201**Date: 22/11/2011****Subject Name: Mining Machinery II****Time: 02.30 pm-05.00 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 coal Ploughs : Principle of operation & construction features. **07**
(b) Explain pit –top layouts for cage winding pits. **07**
- Q.2** (a) Explains various types of Detaching hook. **07**
(b) Differentiate: Rigid guides V/s Flexible guides. **07**
OR
(b) Explain safety catches in shaft fitting with figures. **07**
- Q.3** (a) Advantages of Koepe winding system over the drum winding system. **07**
(b) Describe Ward Leonard method of speed control. **07**
OR
- Q.3** (a) State the advantage and disadvantages of multirole friction winder. **07**
(b) What are the various safety devices on winders. Describe any two. **07**
- Q.4** (a) Describe (1) Tripler (2) creepers & (3) small man clip **07**
(b) Explain Signaling Safety regulations & different signaling system uses in mines. **07**
OR
- Q.4** (a) Factors effecting efficiency of coal cutting equipments. **07**
(b) Explain working of (1) gathering Arm Loader , (2) Flight loader **07**
- Q.5** (a) Explain Continuous Miner with general layout at the face. **07**
(b) State the limitations for the working of a Continuous Miner. **07**
OR
- Q.5** (a) Describe with figures : head gear with various attachments. **07**
(b) Explain (1) SDL (Side discharge loader) (2) Fleet angle **07**
