

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

Subject code: 152205**Date: 01/12/2011****Subject Name: Under Ground Coal Mining****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) Describe briefly long wall mining method **07**
(b) Describe the factors influencing selection of mining method in u/g coal mining **07**
- Q.2** (a) Advantages of Retreating long wall method. **07**
(b) Explain Pneumatic stowing & advantages. **07**
- OR**
- (b) Explain Hydraulic stowing & disadvantages. **07**
- Q.3** (a) Explain with illustrative diagrams of Board and Pillar methods of coal mining. **07**
(b) Explain working of [1] LHD (Load haul dumper) [2] SDL(Side discharge Loader) **07**
- OR**
- Q.3** (a) Describe U/g mine layout of Board & Pillar mining with daily output of 750 MT with detail man power requirement. **07**
(b) Support system used in longwall method of mining. **07**
- Q.4** (a) Explain collection & preparation of Stowing material **07**
(b) Described with figure extraction of Pillar in Board and Pillar method. **07**
- OR**
- Q.4** (a) Advantages & Disadvantages of Room & Pillar method **07**
(b) Explain Barrier and preparatory stopping. **07**
- Q.5** (a) Define principle of stowing . What is packwalls stowing ? **07**
(b) Clarification of U/g coal mining methods. **07**
- OR**
- Q.5** (a) Describe origin & distribution of coal deposit in india. **07**
(b) How characteristics of roofs , Floors and associated rocks affects the working in underground coal mines? **07**
