

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. Sem-III(Mining Engg) Examination December 2009****Subject code: 132202****Date: 19 / 12 / 2009****Subject Name: Mine Development****Time: 11.00 am – 1.30 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Draw figure wherever necessary.

- Q.1** (a) Explain different types of entries in hilly deposits. **07**
(b) Explain different types of entries in opencast workings. **07**
- Q.2** (a) Explain different types of entries in underground working. **07**
(b) Write short note on shapes of shaft. **07**
- OR**
- (b) Write short note on location of shaft. **07**
- Q.3** (a) Describe any two drilling patterns used in soft rocks. **07**
(b) Describe blasting & loading operation during conventional method of drifting. **07**
- OR**
- Q.3** (a) Write short note on providing brisk ventilation during drifting. **07**
(b) How to maintain size & gradient of drift? **07**
- Q.4** (a) Why mechanized method of drifting is preferable over conventional method of drifting? **07**
(b) Explain in brief mechanized drifting by full face tunnel boring machine. **07**
- OR**
- Q.4** (a) Draw schematic line diagram for SDL cum Drill Jumbo. **07**
(b) Explain in brief mechanized drifting with boom type road header. **07**
- Q.5** (a) Describe conventional method of developing open raise. **07**
(b) Describe three compartment method of developing raise. **07**
- OR**
- Q.5** (a) Describe development of raise by long hole drilling. **07**
(b) Describe development of raise by Alimak Raise Climber. **07**
