

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE SEM-VIII Examination May 2012****Subject code: 182203****Subject Name: Mining & processing of Dimensional stone****Date: 14/05/2012****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 Geological & physio - mechanical properties of dimensional stone. **07**  
 (b) Write short note on : Marble deposit in Gujarat. **07**

- Q.2** (a) Explain various conventional mining methods of sand stone mineral. **07**  
 (b) Describe environmental impact of mining and processing of dimensional stones. **07**

**OR**

- (b) Write short note on : Automatic tiling plant. **07**

- Q.3** (a) Explain flame jet cutting methods used in mining of Granite & Marble? Also describe its limitations. **07**  
 (b) Explain mine layout of marble mine with use of chain saw cutting methods. **07**

**OR**

- Q.3** (a) Describe preparation & mounting of blade / discs used for dimensional stone mining. **07**  
 (b) Advantages of using of cranes / hydraulic excavators for marble & granite mining. **07**

- Q.4** (a) Write short note on : Granite deposit in Gujarat vis –a-vis India . **07**  
 (b) Explain allotment procedure of lease and other legal aspects for marble & limestone mineral. **07**

**OR**

- Q.4** (a) Explain various criteria for selection of dimensional stone deposit. **07**  
 (b) Write short note on : Abrasive properties of dimensional stone . **07**

- Q.5** (a) Write advantages & disadvantages of use of wire saw cutting methods . **07**  
 (b) Explain blasting technique in dimensional stone mining. **07**

**OR**

- Q.5** (a) What are the various secondary use of quarry & industry waste of marble & lime stone mineral. **07**  
 (b) Explain various types of policing machine. **07**

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