

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII (NEW) EXAMINATION – WINTER 2018****Subject Code: 2182203****Date: 15/11/2018****Subject Name: Mining & Processing of Dimensional Stone****Time: 02:30 PM TO 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.

		MARKS
Q.1	(a) Discuss the different uses of dimensional stone.	03
	(b) Explain the geology and geographical distribution of granite deposits.	04
	(c) Explain various criteria for selection of dimensional stone deposit.	07
Q.2	(a) Define Abrasive. Describe the various uses of abrasive.	03
	(b) Explain the processing unit of dimensional stone.	04
	(c) Discuss the various physical and mechanical properties of dimensional stone.	07
	OR	
	(c) Discuss the physical and chemical properties of sandstone deposits.	07
Q.3	(a) What do you mean by conventional mining? Explain conventional mining of marble.	03
	(b) Explain the quarrying techniques of dimensional stone.	04
	(c) Explain petrography examination of dimensional stone deposit.	07
	OR	
Q.3	(a) Discuss the salient features of the leasing policy of dimensional stone.	03
	(b) Discuss the selection and shaping of abrasive.	04
	(c) List out various types of polishing machine. Explain any one with neat sketch.	07
Q.4	(a) Explain the method of determining rock quality designation.	03
	(b) Discuss the environmental aspects of stone industry.	04
	(c) Explain circular saw with neat sketch.	07
	OR	
Q.4	(a) Discuss the importance of exploration.	03
	(b) Explain the prospecting and exploration of dimensional stone deposits.	04
	(c) Explain the techniques for reserve estimation of dimensional stone.	07
Q.5	(a) Write note on slate deposits.	03
	(b) Explain processing of dimensional stone deposits with flow chart.	04
	(c) Describe working of derrick crane machine with its sketch.	07
	OR	
Q.5	(a) Discuss the different properties of abrasive.	03
	(b) Discuss the advantages and disadvantages of wire saw cutting.	04
	(c) Explain diamond gang saw with neat sketch.	07
