

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2182203****Date:09/05/2019****Subject Name: Mining & Processing of Dimensional Stone****Time:10:30 AM TO 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.

		MARKS
Q.1	(a) Write a short note on Granite deposits of Karnataka.	03
	(b) Describe the Physico-mechanical properties of Marble.	04
	(c) Describe a consumption pattern of Dimensional stone in India and Abroad.	07
Q.2	(a) Write a short note on the construction of Circular saws.	03
	(b) Describe the manual mining process for the extraction of Limestone.	04
	(c) Name the types of abrasives with their specification. Also write their applications.	07
	OR	
	(c) Explain the leasing policy for the mining of Dimensional stone in India.	07
Q.3	(a) Explain the working principal of Coplanar hole machine.	03
	(b) Write the chemical and physical properties of Slate.	04
	(c) Explain the working of cutting/sawing of Dimensional stone.	07
	OR	
Q.3	(a) Write a short note on varieties of Indian Granite.	03
	(b) Describe the ASTM (American Society for Testing and Materials) specification for Limestone.	04
	(c) Explain the working of steel shot gang saw machine.	07
Q.4	(a) Write the Physico-mechanical properties of Granite.	03
	(b) Describe the mining technique adopted for the extraction of Sandstone in Jodhpur.	04
	(c) Explain the working of Gang saw with horizontal and vertical frame.	07
	OR	
Q.4	(a) Write a note on LD4 drill machine.	03
	(b) Explain the working principal of pneumatic bags.	04
	(c) Describe the steps for fixation of the blade of gang saw in frame.	07
Q.5	(a) Write a short note on marble deposits of Gujarat.	03
	(b) Describe the physical and chemical properties of sandstone.	04
	(c) Write a note on articulated ARM polishing machine.	07
	OR	
Q.5	(a) Explain the working principle of Water jet technique.	03
	(b) Write a short note on manual mining process for the extraction of Granite.	04
	(c) Write a note on single head polishing machine.	07
