

**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.

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

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