

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2022

Subject Code:3172214

Date:12-01-2023

Subject Name:Dimensional Stone Technology

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.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

- Q.1**
- | | |
|--|-----------|
| (a) Name the places or areas of limestone deposit in India. | 03 |
| (b) Discuss the strategies of dimensional stone mining. | 04 |
| (c) How in-situ sawing is done by diamond wire saw? Explain briefly with | 07 |

- Q.2**
- | | |
|--|-----------|
| (a) Name the machineries used for processing of dimensional stones. | 03 |
| (b) Explain the processing of dimensional stone with flow chart. | 04 |
| (c) What do you understand by line drilling and jet flame cutting technique? | 07 |

OR

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| (c) Describe the geology and geographical distribution of granite in India. | 07 |
| Q.3 (a) Name the factors affecting the quality and exploitability of a dimension stone deposit. | 03 |
| (b) Write the export procedure of dimensional stone. | 04 |
| (c) Discuss the environmental impact of mining and processing of dimensional stones. | 07 |

OR

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| Q.3 (a) What is the Global Scenario of Granite Consumption? | 03 |
| (b) What do you mean by dimensional stones? Explain its uses and application. | 04 |
| (c) Write a brief note on marble and its mining method. | 07 |
| Q.4 (a) Explain the resources of dimensional stones in India. | 03 |
| (b) Discuss the major health risk in dimensional stone mining and processing. | 04 |
| (c) What do you mean by prospecting & Exploration? Discuss any one method of it. | 07 |

OR

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|--|-----------|
| Q.4 (a) What do you mean by diamond segments? | 03 |
| (b) Write a procedure for obtaining mining lease. | 04 |
| (c) Write a brief note on Derrick Crane & Front Loader. | 07 |
| Q.5 (a) Explain the secondary use of quarried land and waste of the industry. | 03 |
| (b) What do you mean by block mining? | 04 |
| (c) Explain the following terms: | 07 |

a) Gang saw

b) Chain saw

OR

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|------------|------------|--|-----------|
| Q.5 | (a) | What are the Physico-mechanical properties of slate? | 03 |
| | (b) | Write a note on slab mining. | 04 |
| | (c) | Write a brief note on granite and its mining method. | 07 |
