

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

BID - SEMESTER-V EXAMINATION – SUMMER 2022

**Subject Code:1055105**

**Date:02-06-2022**

**Subject Name:Interior Services-III**

**Time:02:30 PM TO 05:30 PM**

**Total Marks: 50**

**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.

**Q.1 Answer in Brief: (16)**

1. Explain: Sound insulation
2. Explain: Reverberation of sound
3. Name any three Acoustic materials used for sound insulation and their properties.
4. Difference between audible sound and Noise.

**Q.2 Answer In Detail with sketches or diagrams (any three) (24)**

1. What are the basic criteria to be considered to design an auditorium?  
- Give a Short outline: of how to design a ceiling and seating arrangement in an auditorium.
2. Different Types of Sound absorbent materials and their characteristics.
3. How does sound behave in an enclosed space? Explain with sketches.
4. Glass wool panels: Properties, Uses, Applications, Fitting technique.

**Q.3 Short Notes: (10)**

1. Design a soundproof Recording Studio of a Size: 10' X 25'. (Draw a plan)  
Explain the following treatments with **Detail Sections** to achieve Good acoustic and sound insulation.
  - Treatment on walls
  - Treatment on Ceiling
  - Treatment on Floor
  - Treatment on the partition between Listener and performer's Cabin.

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