

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MASTER OF ARCHITECTURE - SEMESTER 3 • EXAMINATION WINTER - 2023

Subject Code: X36202

Date: 01 Dec 2023

Subject Name: ADVANCED TECHNOLOGIES

Time: 10:30 AM TO 12:30 PM

Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) Fill in the blanks (Any 5) 05**
1. _____ is a composite material formed by binding strands, particles, fibers or veneers or thin wood boards together with adhesives
 2. Full form of MDF is _____
 3. _____ is a form of gypsum, a soft sulfate mineral composed of calcium sulfate dihydrate.
 4. _____ material is used to make the concrete translucent.
 5. Full form of VR is _____
 6. _____ bacteria were used in concrete and results show a 24 percent improvement in compressive strength.
- Q.2 (a) Explain in detail different types of engineered wood. 08**
- (b) What are the benefits of a building automation system? 07**
- OR**
- (b) Discuss in detail the environmental benefits of Green Roofs 07**
- Q.3 (a) Advantages and Disadvantages of engineered wood over solid wood 05**
- (b) What are the types of Artificial Intelligence? Explain in detail. 05**
- OR**
- Q.3 (a) Define Smart Materials. Enlist different types of smart materials 05**
- (b) Explain Characteristics and Properties of Alabaster 05**
- Q.4 (a) What is indoor environmental quality? What are the common sources of indoor air contaminants? 05**
- (b) Explain what is Translucent concrete and its application 05**
- OR**
- (b) Explain the different types of sensors used in Indoor Environment Monitoring. 05**
