

GUJARAT TECHNOLOGICAL UNIVERSITY
MASTER OF ARCHITECTURE - SEMESTER 3 • EXAMINATION WINTER - 2024

Subject Code: X36202

Date: 19 Nov 2024

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) Objective Type Questions (Answer any 4 Questions) 08**
- 1. Laminated Veneer Lumber (LVL) is an example of _____ wood.**
 - 2. Artificial stone, also known as _____ stone.**
 - 3. Laminated Strand Lumber is composed of about 95% wood fiber and 5% _____.**
 - 4. _____ is made by mixing marble chips with white cement and some pigments.**
 - 5. Calcite alabaster is usually a little _____ than Gypsum alabaster.**
 - 6. Generally, Optical fibers in the range of __% to __% by volume are utilized for transparent concrete.**
- Q.2 (a) Differentiate between marble and alabaster. 04**
- (b) Write a short note on 'cross-laminated timber (CLT)'. 04**
- OR**
- (b) Write a short note on 'advantages of engineered wood'. 04**
- Q.3 (a) Write a short note on electrified wood. 04**
- (b) Write a short note on sensing floor. 04**
- OR**
- Q.3 (a) What are different applications of self-repairing concrete in architecture? 04**
- (b) Explain various factors affecting the quality of self-repairing concrete. 04**
- Q.4 (a) Describe sources of indoor air pollution. 04**
- (b) What are the factors affecting visual quality of an interior space? 04**
- Q.5 (a) What are immersive technologies? How can they be used for enhancing the quality of interior architecture? 04**
- (b) Write a short note on smart glass. 04**
- OR**
- (b) Describe any one smart device used in interior space for environmental control. 04**
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