Enrolment No._____

SARVAJANIK UNIVERSITY

S-2025 Date: 22-05-25 Time: 09:30 AM to 11:30 AM
Backlog Exam

B.ID - SEMESTER– I EXAMINATION

Course Code: BIID31102 **Total Marks: 50**

Course Name: Basics of Building Materials, components and structure

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Draw figures / sketches wherever required.**

Q1.	**Answer the following**	**10**
	1. Earthquake load is known as a. Static load b. Dynamic load c. Impact load d. None of these 2. Beam transfers load by _____action. 3. Metamorphic rock is the product of weathering of pre-existing rocks, transport of the weathering products, deposition of the material, followed by compaction and cementation of the sediment to form a rock. (True /False) 4. Identify odd one out a. Cast iron b. Wrought iron c. Aluminium d. Steel 5. ___ Sand cannot be used for construction. 6. The innermost central portion of a tree is called a. Pith b. heartwood c. bark d. roots 7. Wall of a framed structure transfers load on a. Column b. Sill c. Beam d. Lintel 8. For a building following aspects are must. a. Strength b. Stability c . Stiffness d. All of these 9. Door inside the building require weather protection. (True /False) 10. Full form of MDF is _____	
Q.2	**Explain in brief (Any Two)**	**10**
	1. Define Fine aggregates and Coarse aggregates. 2. Explain the difference between Ferrous & Non Ferrous metal. 3. Explain gravity loads acting on a building with proper example. 4. Classify different types of Glass with its use.	
Q.3.	**Explain in detail with proper sketches (Any Two)**	**20**
	1. What is the difference between Load bearing structure & framed structure. 2. Classify rock with brief description of each typology. 3. Properties of Plastics and its Uses.	
Q.4.	**Sketch & label (Any two)**	**10**
	1. Draw different components of Superstructure. 2. Cross section of tree with all its layers. 3. Various techniques of wall construction with Bamboo. 4. Explain load transfer for members subjected to Axial compression & bending.	