



# SARVAJANIK UNIVERSITY

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

S-2025 Date: 01-07-25 Time: 09:30 AM to 11:30 AM  
Interim Backlog Exam

## B.ID - SEMESTER- II EXAMINATION

Course Code: BIID31202

Total Marks: 50

Course Name: Building Materials, Systems and Environmental Studies.

### Instructions:

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

### Q.1. Do as directed ( attempt all questions )

10 Marks

1. Width of wooden lintel = \_\_\_\_\_
2. Truss transfer load by bending & shear. (True/False)
3. The lime prevents shrinkage of raw bricks. (True/False)
4. Oxide of iron is chief constituent of good brick earth. (True/False)
5. Modulus of elasticity is given by equation = Stress / strain (True/False)
6. In the given list below which Factors affect the Climate?  
a) Latitude b) Ocean Currents c) Prevailing Winds d) All of Above
7. A good brick earth should contain 50 to 60% silica. (True/False)
8. A first-class brick should not absorb water more than 20 – 22% by weight. (True/False)
9. \_\_\_\_\_ is the vertical elevation of an object above a surface (such as sea level or land)
10. \_\_\_\_\_ are the Sloped wood members that support the roof structure.

### Q.2 Answer the following in brief (Any 2)

10 Marks

1. Enlist the qualities of good brick.
2. Explain defects in brick masonry.
3. Enlist the key component of wooden staircase and define any one component
4. Explain with example Macro and Micro climate

**Q.3. Answer in Detail (Any 2)**

**20 Marks**

1. Classify various types shell structure.
2. Explain Ashlar masonry in detail with sketches.
3. Explain the function of the window. Enlist the parts window. Enlist the type of window.

**Q.4. Answer the following (Any 2)**

**10 Marks**

1. Draw various types of trusses with span.
2. Explain Square Rubble masonry in detail.
3. Draw & label the double shutter wooden frame detail.
4. Draw the sketch & label of wooden stud wall framing detail