



SARVAJANIK UNIVERSITY

S-2024 Date: 15-07-24 Time: 01:30 PM to 04:30 PM
Remedial Exam

B.I.D.-I - SEMESTER- II EXAMINATION

Course Code: BIID21202

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.

Q-1. Do as Directed (Attempt All)

10
Marks

1. In _____ bond brick laid with its length parallel to the face of the wall.
2. The standard brick size is _____ cm x _____ cm x _____ cm
3. The horizontal projected part of head is known as _____
4. Vertical part of shutter is known as _____
5. The vertical elevation of an object above a sea surface is known as _____
6. The tropical climate which consists of heat waves, hot winds and low humidity comes under _____ climatic conditions
7. Modulus of Elasticity is given by equation = _____
8. Brittle material is preferred for structural members (Say True or False)
9. Stone wall can be constructed without use of mortar (Say True or False)
10. A first-class brick should not absorb water more than 20 - 22% by weight (Say True or False)

Q-2 Answer the following in brief (Any Two)

10
Marks

1. What are the qualities of good brick
2. Explain Stone masonry and its uses
3. Enlist the various types of doors and explain any one in detail with sketch
4. Explain Weather shade and its importance in buildings

Q-3 Answer the following in detail (Any Two)

20
Marks

1. What is truss? Explain load transfer, also explain various types of trusses used for different span
2. Explain in detail about Important considerations for designing the opening
3. Explain Rubble and Ashlar masonry in detail with sketches.

Q-4 Answer the following with sketch (Any Two)

10
Marks

1. Explain about Single layer 3 way dome with sketch
2. Explain in detail with sketch about Different types of shell.
3. Draw detail sketch of one brick thick English bond
4. Draw the detailed sketch of Door frame with shutter and label the various parts.