

SARVAJANIK UNIVERSITY

Keep it blank

S-2024 Date: 15-04-24 Time: 01:30 PM to 03:30 PM

Regular / Backlog Exam

B.ID - 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.
4. Draw sketches wherever needed.

Q- 1. Do as directed (attempt all questions)**10**

1. Arch transfers load only by compression (True/False)
2. In truss , members transfers load by bending (True/ False)
3. A mixture of mortar with chicken mesh is known as
a. RCC b. PCC c. Ferrocement d. FCC
4. The actual size of the modular brick is 19 x 9 x 9 cm.
5. Most part of india receives rainfall from
a) March to June b) June to September
c) August to November d) November to February
6. In arches and lintels, arch ring is the
a) Curved ring of masonry forming an arch b) Central voussoir of an arch
c) Radial joints of mortar of an arch d) Upper surface of an arch
7. Following as a tropical climate that consists of heat waves ,hot winds and low humidity
a) Hot-wet b) Hot-dry c) Cool-dry d) Rainy
8. Horizontal part of the wooden opening frame is known as _____.
9. lowermost horizontal member of shutter is known as _____.
10. Hoop tension means Axial tension (True/False)

Q.2 Answer in brief (any Two)**10**

1. Explain types of brick by technique.
2. Explain Stone masonry and its uses.
3. Weather shade and its importance in buildings
4. Write short notes on the Battened, ledged & braced door with suitable sketches

Q.3. Explain in detail with sketches (any Two)

20

1. Explain various types of space frames.
2. Explain the brick manufacturing process in detail.
3. Explain in detail about various consideration for designing the opening.

Q.4. Draw detailed sketches (any two)

10

1. Load transfer in half circular Dome.
2. Single layer three way vault.
3. Plan & elevation of casement window.
4. Plan and elevation of one and the half brick thick Flemish bond.