

SARVAJANIK UNIVERSITY

Keep it!

S-2026 Date: 05-08-26 Time: 09:30 AM to 11:30 AM
Interim Backlog Exam

6

BARCH - SEMESTER- II EXAMINATION

Course Code : BRAR21201

Total Marks: 50

Course Name : Building Material, Construction and Environmental Studies

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Here you can add your own instructions for students

Q1 Fill in the blanks.

(10 marks)

1. _____ is the horizontal and treated wood members that lay directly on the foundation, and provide a base for the wall framing.
2. _____ is the part of the tread or landing that extends beyond the face of the riser. This part is generally rounded or square.
3. _____ is the vertical wood members used in erection of wooden walls.
4. _____ is the horizontal wood members that support floors and ceilings.
5. Stone masonry having finely dressed stones laid in cement or lime mortar is known as _____.
6. _____ measures the horizontal distance east to west of the equator.
7. In the given list below which are the factors affecting Climate?
 - a) Latitude
 - b) Ocean Currents
 - c) Prevailing Winds
 - d) All of Above
8. The climate which consists of heat waves, hot winds and low humidity comes under which climatic conditions?
 - a) Hot-wet
 - b) Hot-dry
 - c) Cool-dry
 - d) Rainy
9. The frog in a brick is provided to reduce weight only. (True/False)
10. The lime prevents shrinkage of raw bricks. (True/False)

Q2 Answer in Brief. (Any two)**(10 marks)**

1. Draw the sketch of wooden floor construction showing the components
2. Draw & label the double shutter wooden door frame detail part plan.
3. Draw various brick closers.
4. Design consideration on 'Natural ventilation'.

Q3 Answer in Detail. (Any two)**(20 marks)**

1. Explain the characteristics of Hot and Humid Climate with sketches
2. Draw a neat, labeled sketch illustrating the anatomy of a wooden staircase.
Additionally, define any five key components of a staircase in brief.
3. Classification of stone masonry. Enlist the various Rubble stone masonry. Support answer with sketches
4. Write about characteristics of good brick. Enlist the types of Bricks.

Q4 Sketch. (Any two)**(10 marks)**

1. Draw the sketch & label of wooden roof truss components
2. Draw the sketch & label any 2 types of wooden joints.
a) Box (finger) joint b) Bridle Joint c) Biscuit joint
3. Types of Moulded brick
4. Draw & define various Horizontal solar shading.