Enrolment No._____

SARVAJANIK UNIVERSITY

W-2024 Date: 20-11-24 Time: 13_30 - 15_30
Regular 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. **When a nail is driven in a wall , following load is applied on wall**
   a) Static load, b) Dynamic load, c) Impact load, d) None of these
2. **Slab transfers load by _____action.**
3. **_____ rocks form when rocks are subjected to high heat, high pressure, hot mineral-rich fluids or, more commonly, some combination of these factors.**
   a) Igneous , b) Sedimentary , c) Metamorphic
4. **There is very limited use of bamboo as foundation material because when in contact with moisture laden surfaces they decay fast.**
   a) Agree, b) Not agree, c) Can't say anything
5. **A construction system where walls are used as filler material between structural members is known as?**
   a) Frame structure, b) Load bearing structure, c) Hybrid structure
6. **Beam at plinth level of a structure is known as**
   a) Plinth beam, b) Ground beam, c) Top beam, d) Foundation beam
7. **Process of heating limestone to get lime is called _____ .**
8. **Following is the purest form of iron**
   a) Cast iron b) Wrought iron c) Mild steel d) High carbon steel
9. **Sand is measured in cubic feet.** (True / False)
10. **Fix support allows rotation.** (True / False)

Q.2 Explain in brief (Any Two) **10**

1. Explain following terms – Point load , uniformly distributed load
2. Classify different types of Glass with its use.
3. State different types of clay.
4. Criteria for the selection of stones
5. Describe Sill and Lintel in a building

Q.3. Explain in detail with proper sketches (Any Two) **20**

1. Properties of Ordinary Cement
2. What are Ferrous Metals? Enlist the types of Ferrous Metals & its applications.
3. Enlist and sketch the types of windows
4. Properties of Plastics and its Uses.

Q.4. Sketch & label (Any two) **10**

1. Draw any two example showing load transfer in Compression.
2. Cross section of Tree with all its layers
3. Various techniques of Wall construction with bamboo
4. Footing for load bearing structure