

# P P SAVANI UNIVERSITY

Second Semester of B. Tech. Examination

Nov-Dec 2021

SECV2020 Building Materials & Construction Technology

10.12.2021, Friday

Time: 09:00 a.m. To 11:30 a.m.

Maximum Marks: 60

## Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in single answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

### SECTION - I

- Q - 1 Answer the Following. (Any Five) [05]
- (i) In Herring Bone Bond, the bricks are placed at an angle of \_\_\_\_\_ from the central line in both directions.
- (ii) Write the function of frog.
- (iii) Give Standard and Nominal Size of the brick.
- (iv) Explain the term Stretcher.
- (v) Write any two requirements of a good plaster.
- (vi) State the raw materials required in the manufacturing of different types of glass.
- (vii) Define dampness.
- Q - 2 (a) Which factors you will consider for the choice of a building material? [05]
- Q - 2 (b) Describe the process of manufacturing of bricks. [05]
- OR
- Q - 2 (a) Enumerate the laboratory tests for cement and describe any one in detail. [05]
- Q - 2 (b) Write a Short note on Ready mixed concrete. [05]
- Q - 3 (a) What are the various types of bitumen and what are their uses? [05]
- Q - 3 (b) Mention the qualities of a good timber. [05]
- OR
- Q - 3 (a) Mention the objectives of proving pointing and plastering to the exposed surfaces. [05]
- Q - 3 (b) State the general properties of glass. [05]
- Q - 4 Answer the Following. (Any One) [05]
- (i) Describe cast in situ and Precast Construction
- (ii) Define the term termite-proofing and describe its types.

### SECTION - II

- Q - 1 (a) Define shallow foundation. Explain the necessity of shallow foundation. [05]
- Q - 1 (b) Define Flooring. Explain types of flooring. [05]
- OR
- Q - 1 (a) Define Deep foundation. Explain the necessity of Deep foundation. [05]
- Q - 1 (b) Explain in brief essential requirement of floor. [05]
- Q - 2 (a) What do you understand by "composite masonry"? Enumerate various types of composite masonry. [05]
- Q - 2 (b) Define a cavity wall. What are its advantages? [05]
- OR
- Q - 2 (a) Write a short note on Ashlar masonry. [05]
- Q - 2 (b) Explain with the help of sketches general features of a cavity wall. [05]

- Q - 3 (a) Define Green building. What are the benefits green building? [05]  
Q - 3 (b) Explain in brief the objects and requirements of Plastering. [05]

OR

- Q - 3 (a) Write a short note on fire safety requirements for buildings. [05]  
Q - 3 (b) Explain in brief the objects and requirements of Painting. [05]

\*\*\*\*\*