

P P SAVANI UNIVERSITY

Fifth Semester of B. Arch. Examination
December, 2021

SAAR3274 Building construction & technology-V

24/12/2021 Friday

Time: 09:00 a.m. To 12:00 a.m.

Maximum Marks: 100

Instructions:

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

- Q - 1 Fill in the blanks (any five) [05]
- (i) Membrane structures are good for span structures
(ii) Shell structure isin nature.
(iii) Cement is a
(iv) Concrete has use of mild steel.
(v) Wet cladding useand mortar.
(vi) Sand face plaster is generally used forsurface.
(vii)
- Q - 2 (a) Short Note on types of cladding. [10]
Q - 2 (b) Short Note on types of flooring materials. [10]
- OR
- Q - 2 (a) Explain cement as vital building material. [10]
Q - 2 (b) Explain ready mix concrete. [10]
Q - 3 (a) Explain with sketches shell structures. [10]
- Q - 3 (b) Explain with sketch dry cladding. [10]
- OR
- Q - 3 (a) Explain PEB structures with sketches. [10]
Q - 3 (b) Explain types of paints [10]
Q - 4 Attempt any one.. [05]
(i) Write five names of stone floorings.
(ii) Write ingredients of cement concrete.
TRUE OR FALSE any five [05]
- Q - 1
(i) Cement is a chemical.
(ii) Use of steel is ideal for large span
(iii) Water cement ratio is important in concrete work.
(iv) Shell structure is homogeneous in nature.
(v) Potable water is must for RCC work.
(vi) Membrane structure is not good for large span structures.
(vii)
- Q - 2 (a) Explain impact of invention of R.C.C. [10]
Q - 2 (b) Advantages /disadvantages of steel structure over R.C.C, structures. [10]
- OR
- Q - 2 (a) Write short note on contemporary building materials. [10]

- Q - 2 (b) Explain steel as building material. [10]
Q - 3 (a) Give examples of shell structures [10]
Q - 3 (b) Give examples of membrane structures. [10]
- OR
- Q - 3 (a) Explain various types of steel trusses [10]
Q - 3 (b) Explain potable water. [10]
Q - 4 Attempt any one [05]
(i) Explain modular system of construction.
(ii) Types of slabs.
