

2nd Sem / Architectural Assistantship
Subject : Building Materials and Construction - I

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Marble is an example of
- a) igneous rock
 - b) sedimentary rock
 - c) metamorphic rock
 - d) none of above
- Q.2 The standard size of bricks is _____
- a) 200 mm x 100 mm x 100 mm
 - b) 190 mm x 190 mm x 40 mm
 - c) 190 mm x 90 mm x 90 mm
 - d) none of above
- Q.3 The minimum crushing strength of a good brick should be _____
- a) 75 kg/sq.cm
 - b) 105 kg/sq.cm
 - c) 90 kg/sq.cm
 - d) none of above

- Q.4 Safe bearing capacity of black cotton soil is _____
a) 50 to 100 kN/sqm b) 100 to 150 kN/sqm
c) 150 to 200 kN/sqm d) 200 to 250 kN/sqm
- Q.5 In an external wall, horizontal D.P.C. is providing at _____ above ground level.
a) 50 to 75 mm b) 150 to 200 mm
c) 250 to 300 mm d) 300 to 350 mm
- Q.6 Chemically active pore fillers _____ the setting of concrete.
a) Retards b) decrease
c) Accelerates d) No change

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Define building stone
Q.8 Define igneous rocks.
Q.9 Define frog
Q.10 Define lintel.
Q.11 Define raft foundation.
Q.12 What is D.P.C?

SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 What are the characteristics of good bricks?
Q.14 What are the various uses of stones.
Q.15 Explain classification of rocks in brief.
Q.16 Write short notes on fly ash bricks.
Q.17 Write a short note on mat foundations.
Q.18 Why it is necessary to provide a damp proof course in a brick masonry wall?
Q.19 Write down harmful effects of dampness.
Q.20 Differentiate between a door and a gate.
Q.21 Define different types of windows.
Q.22 Write a short note on "Brick Jallies" Provided in one brick thick wall in Flemish bond.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Explain the characteristics of 1st class bricks.
Q.24 Define artificial stones. And also discuss the advantages of artificial stone.
Q.25 Explain the various sources which causes dampness in buildings.