

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Enlist various tests conducted on a brick. Explain compressive strength test of brick.
- Q.24 Explain various types of Lintel used in structures.
- Q.25 Explain the various effects of dampness in buildings.

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### 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 Granite is an example of
- a) Aqueous rock      b) Sedimentary rock
- c) Metamorphic rock      d) igneous rock
- Q.2 A good building stone is one which does not absorb more than \_\_\_\_\_ of its weight of water one day's immersion.
- a) 5%      b) 15%
- c) 10%      d) 25%
- Q.3 The percentage of alumina in a good brick clay should vary form.
- a) 20 to 30%      b) 40 to 50%
- c) 30 to 40%      d) 50 to 60%

Q.4 Which of the following should be used for hearting of thicker walls?

- a) Headers                      b) Brick bats
- c) Stretchers                  d) Queen Close

Q.5 The type of arch generally constructed over a wooden lintel or over a flat arch for the purpose of carrying the load of the wall above is

- a) Segmental arch              b) Relieving arch
- c) Pointed arch                d) Flat arch

Q.6 The most important purpose of frog in a brick is to

- a) Emboss manufacture's name
- b) Reduce the weight of brick
- c) Form keyed joint between brick and mortar
- d) Improve insulation by providing 'hollows'

### SECTION-B

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

Q.7 Rock formed by changes in heat and pressure is known as \_\_\_\_\_

Q.8 The size of mould for bricks should be \_\_\_\_\_ the specified size of the bricks.

Q.9 The dimensions of a standard brick are \_\_\_\_\_

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Q.10 Define Basement?

Q.11 Define Pier?

Q.12 Write the name of any two chemicals used in water proofing of buildings.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain the various uses of stones.

Q.14 Write down the properties and uses of marble.

Q.15 What is efflorescence? Explain.

Q.16 Write down the properties of first class brick.

Q.17 Write a short note on Shallow foundation.

Q.18 Write purpose of providing the foundations to the structures.

Q.19 Write a short note on use of "Segmental Arch".

Q.20 What are the functions of Lintel? Explain briefly.

Q.21 What is damp -proof course? Why and where is it provided?

Q.22 Write a short note on various types of D.P.C. materials used in building.

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