



KD-6042

**B. Arch. I (Sem. I) Examination
December - 2012**

**ARC - 102 : Building Material &
Construction Technology - I
(New Course)**

Time : 2 Hours]

[Total Marks : 60

Instructions :

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of signs on your answer book.

Name of the Examination :

Name of the Subject :

Subject Code No. : Section No. (1, 2,.....) :

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks.

(3) Neat sketches or illustrations shall carry more credentials.

1 Do as directed

10

- In footing _____ degree of angle is considered to be ideal for transfer of load.
- According to geological classification there are _____, _____ and _____ types of rocks.
- Soil in Surat is _____ soil.
- Gauged mortars are used to achieve good qualities of both cement and lime (true/false)
- Great wall of china was built by burnt and sundried bricks (true/false)
- Each and every part of a frame structure plays an important role in load transfer. (true/false)
- Double bullnose brick (only sketch)
- Horse shoe arch (only sketch)

2 Answer the following

20

- Types of random rubble masonry
- What is substructure and superstructure? Explain with section components of substructure and super structure.

- 3 Sketch The Following any 5** **20**
- i. One brick thick English bond with elevation
 - ii. Dressing of stone
 - iii. Strip Foundation
 - iv. Relieving arch
 - v. R.C.C Boot Lintel
 - vi. Soldier bond
- 4 Answer the following (any 2)** **10**
- i. Qualities of good bricks
 - ii. Enlist Types of mortars and discuss mortars based on binding material
 - iii. Discuss in detail types of aggregates
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