



KD-6051

B. Arch. I (Sem. I) Examination

December - 2012

**ARC-102 : Building Material & Construction
Technology - I**

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. Arch. I (Sem. I)

Name of the Subject :
ARC-102 : Building Material & Construction Technology - I

Subject Code No. : 6 0 5 1 Section No. (1, 2,.....) : Nil

Seat No. :
[] [] [] [] [] []

Student's Signature

(2) Figures to the right indicate full marks.

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

1 Fill In the blanks

10

- Ordinary cement achieves 70 % of its final strength in _____ Days
- When the width of a brick is cut half , such is brick is known as _____
- Proportion of cement mortar in plaster is _____ .
- The row of arches in continuation is called _____ .
- It is advisable to use _____ type of sand in building construction.
- The percentage of impurities in _____ limestone is less than 5%
- The major content of calcareous rocks is _____
- The place from which rocks are extracted is called a _____
- Every element of an arch remains in _____ .
- An arch having its center point below the center line is called _____

2 Answer the following (any 2)

16

- Properties and uses of Cement
- Explain function of sand in mortars
- Compare stone masonry v/s brick masonry

- 3 Sketch The Following any 6 (4 marks each) 24**
- i. R.C.C boot lintel
 - ii. Elevation of polygonal stone masonry
 - iii. Elevation of flint wall
 - iv. Elevation of ashlar wall uncoursed
 - v. Elevation of random rubble wall uncoursed
 - vi. Stretcher and header bond
 - vii. Different types of finishes of striking and pointing
- 4 Explain in detail construction of arches. Support the answer 20
with neat and labeled sketches**
- 5 Answer (any 2) 30**
- i. Explain strip and strap Foundation in detail.
 - ii. Explain load bearing and frame structure with sketches
 - iii. Explain Raking bond
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