



RM-6051

B. Arch. I (Sem. I) Examination

May / June – 2010

Building Material & Const. Technology - I

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

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

Name of the Examination :
B. Arch. 1 (Sem. 1)

Name of the Subject :
Building Material & Const. Technology - 1

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

Seat No. :

Student's Signature

- (2) Figures on the right indicate full marks.
(3) Neat sketches will carry more credentials.

1 a. Categorize the following into different type of buildings **5**

- i Dance halls
- ii orphanages
- iii Prisons
- iv Chawls
- v Barns

B. Classify the following stones in Igneous, sedimentary and metamorphic **5**

- i Granite
- ii Limestone
- iii Basalt
- iv Kankar
- v Quartzite

1 B Answer the following **10**

- a Mention criteria for designing the bearing of the lintel
- b The Actual size of traditional brick is _____ cm.
- c Quick lime is Also known as _____
Define
 - i. Extrados
 - ii. Span
 - iii. Adulterant
 - iv. Abutment
 - v. Foliated rocks

- d Mention various loads acting upon a building
 e Soil In Ahmadabad is _____
- 2 Discuss Isolated piers in English as well Double Flemish bond. Draw neat sketches 10
- 3 a Explain various types of construction systems and discuss in detail the system followed in your city? 10
 or
 b Write various varieties of cement available and discuss high alumina cement
- 4 Answer the following with neat sketches wherever required .(Any Four) 20
 a Difference between Quick setting cement and Rapid hardening cement
 b Explain Random Rubble Masonary.
 c Write a note on Raking Bond
 d What are Substructure and super Structure. Describe components of sub structure and super structure.
 e Intermittent Kiln and Continuous Kiln.
 f Write note on Stretcher bond
- 5 Enlist Classification of arches and explain in detail classification based on workmanship 10
- 6 a Explain the role of foundation in transferring the load of the superstructure. Explain various types of combined footing. 10
 or
 b Discuss quality of good building stone
- 7 Answer the following (Any Four) 20
 a Isolated Footing
 b Distinguish between arch and lintel, how does flat stone arch differ from stone lintel
 c Discuss various uses of stone.
 d Discuss Quick Lime.
 e Write a short note on Aggregates.
 f Compare Brickwork and Stonework.
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