



AE-6022

B. Arch. - II (Sem. III) Examination

May / June - 2015

**ARC-302 : Building Materials & Construction
Technology - III
(Syllabus "D")**

Time : 2 Hours]

[Total Marks : 60

Instructions :

(1)

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

Name of the Examination :
B. ARCH. - 2 (SEM. 3)

Name of the Subject :
Building Material & Cons. Tech.-3 (ARC-302) (Syllabus "D")

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

Seat No. :

Student's Signature

- (2) Figures in right indicate full marks.
(3) Support your answers with necessary icons and sketches wherever necessary.
(4) All questions have to be attempted in one answer sheet only.

- 1 Explain the terms with schematic diagrams : (any five) **10**
- (1) Hip Roof
(2) Single roof system
(3) Rafter
(4) Valley of a roof
(5) Wall plate and its function
(6) Mansard roof truss
- 2 (A) Differentiate with neat and clean diagrams : (any two) **10**
- (1) Collar beam roof and collar and scissor roof
(2) King post roof truss and queen post roof truss
(3) Clay tile roofing and metal tile roofing
- (B) What type of roof system you will suggest to cover an exhibition area of size 24 m × 24 m and why ? Also give the choice of materials for the same. Explain with the help of neat and illustrated diagram. **05**

- 3** (A) Answer in brief or **one** line : **04**
- (1) What are Aesthetic floors ?
 - (2) What are the major components of single joist timber floor ?
 - (3) What are suspended floor or upper floors ?
 - (4) What are the two typical methods of constructing ground floors ?
- (B) Distinguish between or differentiate between : **08**
- (1) Distinguish between Double joist and Triple joist.
 - (2) Distinguish between dead load and live load.
- 4** (A) Answer in detail : (any one) **08**
- (1) What is a composite floor system? Explain in detail with its construction method.
 - (2) Enlist all the types of RCC slab and explain all its types in brief with sketches.
- (B) Short note : (any one) **05**
- (1) Concrete jack arch floor.
 - (2) Composite floor construction.
- 5** Write short notes on : (any two) **10**
- (1) Explain Slump test for workability of concrete
 - (2) What is "Proportioning of Concrete ?" List the methods by which proportions of various materials are decided.
 - (3) What is the difference between plain Cement Concrete and Reinforced Cement Concrete (PCC and RCC) ?
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