

Total No. of Questions : 4]

SEAT No. :

P3331

[Total No. of Pages : 2

[5257]-2001

F.Y. B.Arch. (Semester - II)

**BUILDING TECHNOLOGY AND MATERIALS - II (Revised)
(2015 Pattern)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary.*
- 5) *Answer all questions from Section-I on Drawing Sheets, and from Section-II in Answer Book only.*

SECTION - I

Q1) Draw any one of the following : **[20]**

Provide a single timber floor for first floor a room of size 2750mm × 3500mm built in 1½ (one and half) brick wall. Draw Plan and Section to the Scale 1:20

Draw the following to a scale 1:5

- a) Joint between Joist and wall plate.
- b) Fixing of wall plate to wall.

OR

Provide a timber water proof flush door for a bath room with walls of 230 thick brick masonry surrounding it. Consider lintel level at 2100mm.

- a) Draw plan, elevation and section to a scale of 1:10.
- b) Sketch joinery detail between head and post

P.T.O.

Q2) Explain with neat sketches: **[15]**

Explain with neat sketches:

- a) Any 5 types of joints in bamboo.
- b) Any 2 types of joints in floor boards.

OR

Draw proportionate sketches:

- a) Draw a neat sketch of queen post and name its various parts and members.
- b) Draw and explain any three members used in timber staircases.

SECTION - II

Q3) Attempt any two : **[20]**

- a) Draw neat, proportionate sketches, notes on uses of five different tools & equipment used for carpentry works.
- b) Draw neat & proportionate sketches
 - i) Barrel Vaults and cross vault
 - ii) Any two types of domes
- c) Explain different types of clay roofing with short note and sketch.

Q4) Write short notes with relevant sketches (any three) : **[15]**

- a) Explain terms Single, double and Triple floors in timber.
- b) Market forms of timber and it's any five uses.
- c) Explain Reinforced brick masonry with short note and sketch.
- d) Write down qualities of good timber.
- e) Explain different timber preservation methods.

