

Total No. of Questions : 4]

SEAT No. :

**P3866**

[Total No. of Pages : 2

**[5062] - 2001**

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

**BUILDING TECHNOLOGY AND MATERIALS - II**

**(2015 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :-*

- 1) *Answers to the two sections should be written in separate books.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*
- 5) *All questions are compulsory.*

**SECTION - I**

**Q1)** Answer any one of two :

**[20]**

- a) Draw plan and section through a double timber floor to be provided for a room size of 9.50m × 5.0m (internal measurement) at a scale of 1:20 and any two details at scale of 1:5.
- b) A straight flight T.W. Staircase from ground floor to Mezzanine floor is to be provided with floor height of 2.10m and width of 0.9m. Draw plan and section at a scale of 1:10 and any two details at a scale of 1:2.

**Q2)** Answer any three of five :

**[15]**

- a) Explain with sketches various types of Vaults.
- b) Explain with sketches different types of reinforcement used for any two types of brick masonry.
- c) Explain with sketches purpose of strutting giving two examples.
- d) Explain with sketches any three types of defects in timber.
- e) Explain with sketches any three tools used for timber construction.

**P.T.O.**

## SECTION - II

**Q3)** Answer any two of three **[20]**

- a) Explain with sketches the openable louvered window operation.
- b) Draw and annotate the section through lean to roof for a span of 2.0m.
- c) Explain with sketches any five types of joineries used in Bamboo construction.

**Q4)** Answer any three of five **[15]**

- a) Different types of timber seasoning.
- b) Explain good qualities of bricks.
- c) Bearing joints in timber (any three).
- d) Explain any two types of roofing tiles.
- e) Sketches of any three types of Arches.

