

$$09 + 02 = (11)$$

**B.ARCHITECTURE – FOURTH SEMESTER,
BUILDING CONSTRUCTION – IV,**

AR- 402

(RA/RP)

Max. Marks: 90

M/18

Duration of Exam: Four Hours

Note:

1. Attempt any TWO question each from Part – A.
2. Attempt any ONE question each from Part – B.
3. Attempt THREE questions in total.
4. All questions carry equal marks.
5. Do not erase the construction lines.
6. Credit will be given for neat drafting and labelling.
7. Choose a suitable scale for drawing.
8. Assume any missing data and mention the same.

PART – A

- Q1. List down the various types of roof coverings, briefly explain their constituent properties and uses. Also explain the process of laying these roof coverings with the help of sketches. (30)
- Q2. List down the various types of timber roofs. Briefly explain their salient features along with sketches. (30)
- Q3. A multipurpose hall of dimensions 10 metres X 30 metres is to be constructed for a school. The minimum height of the interior space is required to be 6 metres. Design an appropriate roofing system using built up timber trusses. Draw the plan/s, and cross section at an appropriate scale. Also draw the details of the truss, roof covering fixing, soffit, and rainwater drainage. (30)

PART – B

- Q4. A sliding and folding door is to be installed in a garage. The dimension of the opening is 4.5 metres wide and 2.75 metres high. Draw the plan, elevation, section, along with the relevant details on a suitable scale. (30)
- Q5. Design and detail a dog legged wooden staircase with a width of 1.2 metres and for a floor to floor height of 3 metres. Draw the plan/s, sectional elevation, elevation, and the appropriate details. (30)