## BACHELOR OF ARCHITECTURE FIRST YEAR FIRST SEMESTER EXAM 2019 (Old) ARCHITECTURAL GRAPHICS - I

Time: 4 Hours Full Marks: 100

## Attempt all questions

1. Construct ellipse by the oblong Method, given the two axes as follows:

Major axis - 65 mm. Minor axis - 45 mm.

15

2. The top view of 80 mm long line AB measures 65 mm, while the length of its front view is 55 mm. End A is 25 mm in front of the VP and 20 mm above the HP. Draw projections and determine the angles with HP and VP.

Or,

Draw the projections of a thin circular plate of 55 mm dia resting on the circumference, its plane inclined at 45° to the H.P. and

- (a) The top view of the dia making 30° angle with the V.P.
- (b) The dia AB making 30° angle with the V.P.

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3. A square prism edge/side of base 30mm and height 45mm is resting on HP on one of the edges of the base. The edge on which it rests on HP makes 45° with VP. The base if the prism makes 30° with HP or the axis of the prism makes 60° with HP. Draw the projections of the prism (i) base is away from the observer or nearer VP. (ii) base is nearer to observer or away from VP.

15

- A right circular cylinder, base diameter 30mm and height 60mm, rests on its base on H.P. A section plane perpendicular to V.P. and inclined to H.P. at 45°, cuts the cylinder meeting its axis at a distance of 35 mm from its base. Draw the front view, sectional top view, sectional side view and true shape of the section, for the truncated cylinder. Also develop the surfaces of the truncated cylinder.
- 5. A vertical cylinder of 60 mm diameter is penetrated by another cylinder of 40 mm diameter, which is parallel to both the HP and the VP. The axes of two cylinders are 9 mm apart. Draw projections showing curves of intersection.

25

## 5 marks for neat drafting and cleanliness