

**B. ARCH. First Year 1st Semester Examination, 2017(OLD)
Architectural Graphics - I**

Time: 4 Hours

Full Marks: 100

Attempt all questions

1. Construct following regular polygons of side 25 mm on the same base line.
Square, Pentagon, Hexagon, Octagon. **15**

2. A line AB, 60 mm long has its end A 20 mm below HP and 25 mm behind VP. The end B is 50 mm below HP and 65 mm behind VP. Draw the projections of AB and the true angles with HP and VP. **15**

3. Draw the projections of a cube of 25 mm long edges resting on the ground on one of its corners with a solid diagonal perpendicular to the V.P. **20**

4. 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 30 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. **25**

5. A vertical cylinder of 50 mm diameter is completely penetrated by another cylinder of 45 mm diameter, their axes bisecting each other at right angles. Draw their projections showing curves of penetration, assuming the axis of the penetrating cylinder to be parallel to the VP. **20**

5 marks for neat drafting and cleanliness