

**B. E. First Semester (All) / SoE – 2018-19 Examination**

**Course Code : ME 2101**

**Course Name : Engineering Graphics**

Time : 3 Hours ]

[Max. Marks : 60

**Instructions to Candidates :—**

- (1) Solve Any **Four** questions.
  - (2) Solve **Q. No. Two, Three, Four and Five** by using **First Angle** projection method.
  - (3) All questions carry marks as indicated.
  - (4) Due credit will be given to neatness and adequate dimensions.
  - (5) Last half an hour (30 minutes) is for valuation.
  - (6) Open the ESE template from the desktop.
  - (7) Fill the Name Block.
  - (8) Save file as File Name e.g. ESE-(ESE Roll No.).
  - (9) Solve all the problems within the space provided in the Template.
  - (10) Retain the construction lines by cyan color.
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1. Line AB 250 mm long. TV of the line AB measures 175 mm and inclined  $50^\circ$  to VP. End A is 50 mm above HP and 100 mm in front of VP. Line AB is in first quadrant. Draw projections of the line. Find True inclinations with HP and VP.  
15 (CO 2, CO 5)
  2. Rhombus Plate of diagonals 150 mm and 100 mm appears as a Square of 100 mm diagonals in TV. Draw its Projections when smaller diagonal is parallel to both the planes. Find surface inclination with HP.  
15 (CO 2, CO 5)
  3. Hexagonal Prism of base side 75 mm and height 200 mm is resting on its corner of the base, such that the base is inclined  $40^\circ$  to HP and axis parallel to VP. Draw its Projections.  
15 (CO 2, CO 5)

4. Square Pyramid of base side 100 mm and height 200 mm is resting on its base on HP with base edges equally inclined to VP. It is cut by an AIP section plane, inclined  $45^\circ$  to base passing through a point on axis, 50 mm from the Apex. Draw sectional TV, True shape of the section and also draw development of retained solid.  
15 (CO 3, CO 5)
5. Vertical Cylinder of base diameter 200 mm is resting on its base HP. It is completely intersected by another horizontal cylinder base diameter 100 mm. Axes of the solids are perpendicular and bisecting with each other. Take height of solids 400 mm. Draw projections showing curves of Intersection.  
15 (CO 4, CO 5)