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.

1. Line AB has its end A 75 above HP and 75 mm in front of VP. The endpoint B is 25 mm above HP and 150 mm in front of VP. The projector distance is 200 mm. Draw the projection of line of AB and show its true length, true angle with the HP and VP. 15 (CO 2, CO 5)

2. Isosceles Triangular Plate of base 100 mm and altitude 150 mm appears as an equilateral triangle of 100 mm side in FV. Draw its Projections, when base of that triangle makes an angle of 45^0 to HP. Find surface inclination with the VP. 15 (CO 2, CO 5)

3. Hexagonal Pyramid of base side 100 mm and height 200 mm is resting on one of its base corner on HP, with an axis is inclined 40^0 to HP and axis parallel to VP. Draw Projections. 15 (CO 2, CO 5)

4. Square Prism of base side 75 mm and height 200 mm is resting on its base on HP, with a base edges equally inclined to VP. It is cut by an AIP section plane inclined 45^0 to base and bisecting the axis. 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 penetrated 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)