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 200 mm long is inclined at 35^0 to the HP and 40^0 to the VP. Its end A is in the HP and 50 mm behind the VP. Endpoint B is in I – quadrant. Draw the projection of line and determine apparent lengths and apparent inclinations. 15 (CO 2, CO 5)

2. A Circular Plate of diameter 150 mm appears as ellipse of major axis and minor axis 150 mm and 100 mm respectively in FV. Draw its Projections when its major axis is inclined 30^0 to HP. Find surface inclination with the VP. 15 (CO 2, CO 5)

3. Triangular Prism of base side 75 mm and height 200 mm is resting on its base edge such that the axis is inclined 40^0 to HP and parallel to VP. Draw its Projections. 15 (CO 2, CO 5)

4. Hexagonal Pyramid of base side 100 mm and height 200 mm is resting on its base on HP, such that two base edges are perpendicular 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 Square Prism of base edge 200 mm is resting on its base on HP, with its vertical faces equally inclined to VP. It is completely intersected by another square horizontal square prism of base edge 100 mm with its lateral faces equally inclined to HP. Axes of both the prism are bisecting and perpendicular to each other. Draw projections showing lines of intersection. Take height of both Prisms as 400 mm. 15 (CO 4, CO 5)