

18EG15/25
First Semester B.E. Degree Examination - 2018
ENGINEERING GRAPHICS
Time: 3 Hours
(COMMON TO ALL BRANCHES)
Max. Marks: 100

Note: 1. Answer three full questions
3. Draw to actual scale
2. Use A4 sheets supplied.
4. Missing data, if any, may be assumed suitably.

1. A line AB measuring 70 mm has its end A 15 mm in front of VP and 20 mm above HP and the other end B is 60 mm in front of VP and 50 mm above HP. Draw the projections of the line and find the inclination of the line with both the reference planes of projection.

## OR

1. A rectangular lamina of sides $20 \mathrm{~mm} X 30 \mathrm{~mm}$ rests on HP on one of its longer edges. The lamina is tilted about the edge on which it rests till its plane surface is inclined to HP at $45^{\circ}$. The edge on which it rests is inclined at $30^{\circ}$ to VP. Draw the projections of the lamina.
2. A Square pyramid 25 mm sides of base and 60 mm axis length rests on HP on one its corners of the base such that two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis is inclined to HP at $40^{\circ}$ and to VP at $30^{\circ}$.
3. A rectangular prism of base $30 \mathrm{~mm} \times 20 \mathrm{~mm}$ and height 60 mm rests on HP on its base with the longer base side inclined at $40^{\circ}$ to VP. It is cut by a plane inclined at $45^{\circ}$ to HP , perpendicular to VP and bisects the axis. Draw the development of the lateral surface of the prism.

## OR

3. A triangular prism base side 30 mm and length 70 mm is resting on rectangular face on top of a square slab of side 70 mm and 25 mm thickness .Draw the isometric projections.
