

## CBCS SCHEME

18EGDL15/25

First/Second Semester B.E. Degree Examination, December 2019

## **ENGINEERING GRAPHICS**

Time: 3 Hours

## (COMMON TO ALL BRANCHES)

Max. Marks: 100

Note:

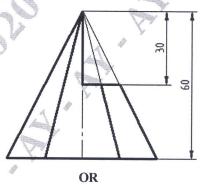
- 1. Answer three full questions.
- 2. Use A4 sheets supplied.
- 3. Draw to actual scale.
- 4. Missing data, if any, may be assumed suitably.
- 1. The end B of a line AB is on a horizontal plane, the top view of the line measuring 80 mm makes an angle of 30° with XY line. The end A is on the vertical plane and 50 mm above the horizontal plane. Draw the top and front views of the line and obtain the true length of the line. Also find inclinations of the line with the two planes.

  25 Marks

OR

- A circular lamina of 60 mm diameter rests on VP such that one of its diameter is inclined at 30° to VP and 45° to HP. Draw its top and front views in this position.
   25 Marks
- A Hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP to 40° and appears to be inclined to VP at 45°.

  45 Marks
- 3. A hexagonal pyramid of 30 mm sides of base with a side of base parallel to VP. Draw the development of the lateral surfaces of the retained portion of the pyramid which is shown by dark lines in the following figure.



30 Marks

A frustum of cone of base diameter 50 mm, top face diameter 25 mm and height 50 mm is placed centrally on the top face of a cylinder diameter 60 mm and height 60 mm. Draw the isometric projection of the combination.
 30 Marks