

Library Einst Second Second

17CED14/24

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

# **COMPUTER AIDED ENGINEERING DRAWING**

Time: 3 Hours

# (COMMON TO ALL BRANCHES)

Max. Marks: 100

### Note:

ANGALOR

- 1. Answer three full questions.
- 2. Use A4 sheets supplied.
- 3. Draw to actual scale.
- 4. Missing data, if any, may be assumed suitably.
- A point A is 20 mm above HP and in the first quadrant. Its shortest distance from the XY line is 40 mm. Draw the projections. Determine its distance from VP.
  10 Marks
  - A line AB 100 mm long is inclined to HP at 45° and inclined to VP at 30°. Draw front and top views of the line and determine their lengths. Also determine the perpendicular distance of end Q from both HP and VP.
    20 Marks

#### OR

1. A pentagonal lamina having edges 25 mm is placed on one of its corners on HP such that the perpendicular bisector of the opposite edge passing through the corner on which the lamina rests is inclined at 30° to HP and 45° to VP. Draw the top and front views of the lamina.

30 Marks

- A pentagonal pyramid of 25 mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corners on which it rests makes equal inclinations with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and VP at 30°.
- 3. A square pyramid of side of base 45 mm, attitude 70 mm is resting with its base on HP with two of the base edges parallel to VP. The pyramid is cut by a section plane which is perpendicular to the VP and inclined at 40° to the HP. The cutting plane b.sects the axis of the pyramid. Obtain the development of the lateral surface of the truncated pyramid.

30 Marks

# OR

3. A frustum of a 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