KBNU
KHAJA BANDANAWAZ
UNIVERSITY

FACULTY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
Second Semester B.E. Degree Examination - 2020
ENGINEERING DRAWING (19KBEDR24)

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. Missingdata, if any, may be assumed suitably.

1. a. A point 30 mm above XY line is the front view of 3 points P, Q and R. The top view of R is 40 mm behind VP, the top view Q is on XY line and top view of point P is 45 mm in front of VP. Draw the projections of the points and state the quadrants in which the points are situated.   **10 Marks**

   b. One end of a line is 30 mm in front of VP and 30 mm above HP. The line is inclined at 40 deg. to HP and its top view measuring 60 mm, is inclined at 50 deg. to XY. Draw the projections of the line and determine true length and inclination with VP.   **20 Marks**

   OR

   An equilateral triangular lamina of 25 mm sides lies with one of its edges on HP such that the surface of the lamina is inclined to HP at 60 deg. The edge on which it rests is inclined to VP at 60 deg. Draw its projections.   **30 Marks**

2. A pentagonal pyramid 25mm sides of base and 50mm axis length rest on HP on one of its edges of the base. Draw the projections of the pyramid when the axis is inclined to HP at 45deg and appears to be inclined to VP at 40 deg.   **40 Marks**

3. A hexagonal pyramid of sides 35 mm and altitude 65 mm is resting on HP on its base with two of its base sides perpendicular to VP. The pyramid is cut by a plane inclined at 30° to HP and perpendicular to VP and is intersecting the axis at 30 mm above the base. Draw the development of the remaining portion of the pyramid.   **30 Marks**

   OR

   The frustum of a square pyramid of base 40 mm, top face 20 mm and height 60 mm rest on the center of the top of a square block of sides 60 mm and height 20 mm. The base edges of the pyramid are parallel to the top edges of the square block. Draw the isometric projection of the combination of the solids.   **30 Marks**

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