R09 Code No: 51013 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B.Tech I Year Examinations, May - 2016 **ENGINEERING DRAWING** (Electronics and Communication Engineering) Time: 3 hours Max. Marks: 75 Answer any five questions All questions carry equal marks The focus of a curve is 6 cm from the directrix and the eccentricity is 2:3. Draw 1.a) and name the curve.b) A circle of 40 mm dia is rolling along a straight line without slipping. Draw the curve traced out by a point on the circumference, for one complete revolution. Name the curve. 2.a) Two points A and B are in H.P. The point 'A' is 20 mm infront of V.P. while 'B' is behind V.P. The distance between their projectors is 70 mm and the line joining their top views make an angle of 45° with xy. Find the distance of 'B' from V.P. The top view of 70 mm long wire measures 50 mm. The line is in V.P. Its one end is 20 mm above HP. Draw the projections and find its inclination. A Square ABCD of 40 mm side has a corner 'A' in H.P and its diagonal AC 3. inclined at 30° H.P and diagonal BD inclined at 45° to V.P and parallel to H.P. Draw the projections. [15] 4. A Cylinder of 40 mm dia 70 mm height is resting on its base in HP. It is cut by a section plane perpendicular to V.P, inclined at 30° to HP and passes through the left top corner of the cylinder. Draw the development of the lateral surface of the cylinder [15]: 5. A Vertical cylinder of 60 mm dia. Height 100 mm is completely penetrated by another cylinder of 40 mm dia, such that their axes bisect each other at right angles. Draw the projections showing the curves of intersection. [15] A square pyramid of 3 cm side 4 cm height is resting centrally on the top of a 6. square block of 5 cm side and height 4 cm. Draw the isometric projection of the combination. [15]7. A pentagonal lamina of 30 mm sides lies on the ground. The corner nearer to PP is 15 mm behind picture plane and an edge containing that corner is making an angle of 400 to PP. The station point is 40 mm infront of PP, 50 mm above G.P and lies in a central plane passing through the midpoint of the lamina. Draw the perspective projection.

