Sl. No.	:	6314
Unique Paper Code	:	1143504
Name of the Paper	:	Engineering Graphics & Drawing
Name of the Course	:	B. Tech. Polymer Science
Semester	:	V
Duration	:	3 Hours
Maximum Marks	:	75 Marks

F-5

Instructions for candidates: Question No.1 is compulsory. Attempt any 7 questions from Question no 2 to Question no 9.

Q 1-

(a) Write freehand, in single stroke vertical capital letters of 3mm height. (4)

(b) Show by the sketches the difference between (i) continuous or chain dimensioning (ii) progressive or parallel dimensioning (4)

(c) A point P is 50 mm from both the reference planes. Draw its projections in all possible positions (4)

Q 2- The Projectors of the ends of a line AB are 50 mm apart. The end A is 40 mm above the HP and 25 mm in front of the VP. The end B is 10 mm below the HP and 40 mm behind the VP. Determine the true length and traces of AB and it's inclinations with the two planes. Also indicate true length in mm, distance of traces in mm from reference line. (9)

Q 3- A straight line PQ 60mm long has its end P 15 mm above the HP and end Q 45 mm in front of VP. Draw the projection of line PQ and locate vertical and horizontal traces if it is inclined at 30^0 to the HP and 45^0 to the VP. (9)

Q 4- A regular Hexagon of 25 mm side has a corner in the HP. It's surface is inclined at 45° to the HP and the top view of the diagonal through the corner which is in the HP makes an angle of 30° with the VP. Draw it's projections. (9)

Q 5- A semicircular plate of 80 mm diameter has it's straight edge in the VP and inclined at 45° to the HP. The surface of the plane makes an angle of 30° with the VP. Draw it's projections. (9)

Q 6- A cube of 40 mm side is resting on one of it's corners in the HP The diagonal of the solid contained by the corner is vertical and lies in a plane perpendicular to HP and VP. Draw the projections of the solid. (9)

Q 7- A Pentagonal Pyramid base 30 mm side, and axial height 60 mm lies on one of it's triangular faces in the HP with axis parallel to VP. It is cut by a sectional plane normal to the HP, and inclined at 30° to the VP and passing through the middle point of the axis thus removing the apex. Draw the apparent shape and true shape of the section of the solid. (9)

Q 8- A pentagonal pyramid, base 30 mm side and axial height 70 mm, resting on it's base in the HP, with an edge on base parallel to VP and nearer to it. It is cut by a section plane, which is perpendicular to the VP and 45° to the HP and cutting the axis at the mid point. Draw the development of the cut prism. (9)

Q 9- Draw the isometric projection of the solid from its three views given below. (9)