

GREENLAWNS HIGH SCHOOL  
PRELIMINARY EXAMINATION YEAR 2024 - 2025

SUBJECT : TECHNICAL DRAWING APPLICATIONS

CLASS : 8

TIME : 3 HOURS

MARKS : 100

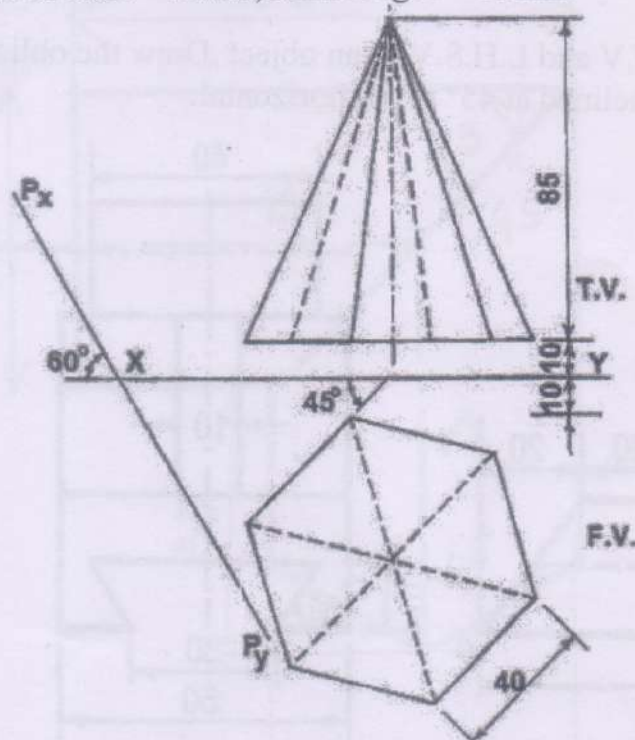
Instructions:

- You must attempt three questions from Section A and two questions from Section B.
- Each Section must be answered on separate sheet.
- All construction lines must be shown.
- All dimensions are in mm.
- The intended marks for questions are given in brackets.

SECTION A (48 Marks)  
(Attempt any 3)

Q.1 Construct a PLAIN SCALE of Representative Fraction = 7:2000, long enough to measure 39 meters. Taking the measurements from the scale constructed, draw a parallelogram ABCD given side AB = 23 meters, side AD = 11 meters and an angle DAB = 60°, then construct a triangle such that the area of the triangle is equal to the area of the parallelogram. (16)

Q.2a) Figure(1) below shows two views of a Hexagonal Pyramid with axis perpendicular to Vertical plane and parallel to the Horizontal plane in Third Angle Method. (10)  
Draw the Auxiliary Front view of the figure. One side of the base edge is inclined at 45° to H.P. Side of base = 40mm, Axis height = 85mm.



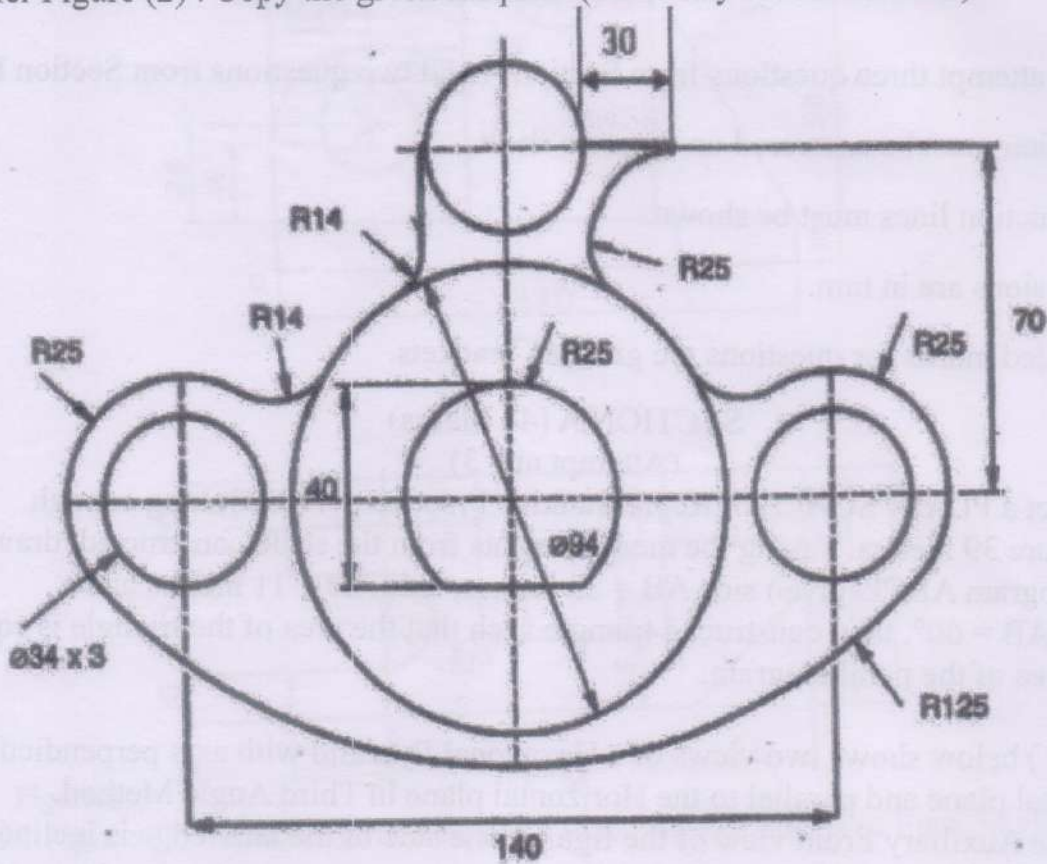
Figure[1]

Q2b) Construct Square of diagonal 60mm. Draw 4 circles outside the square such that each circle touches one sides of the square and two other circles. (6)

Q.3a) Draw F.V. and T.V. of a cone of base radii 30mm and axis height 65mm resting with its axis inclined at  $30^\circ$  to H.P. and parallel to V.P. (Use First angle method) (10)

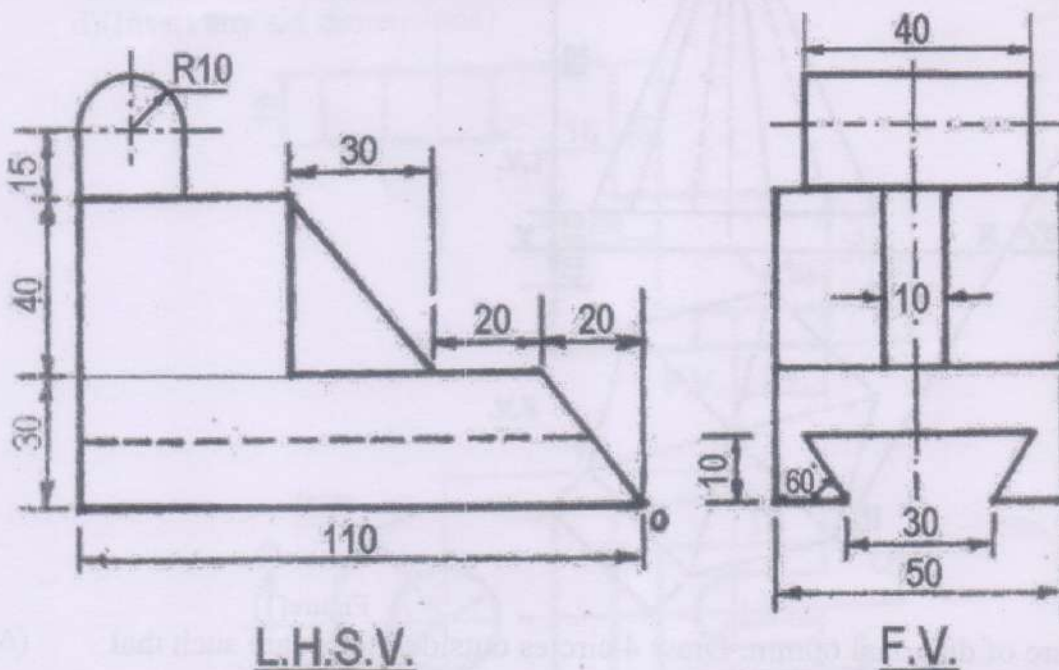
b) Construct a Parabola using Oblong method having base length 110mm and axis height 60mm. (6)

Q.4 Refer Figure (2) . Copy the given template (Insert any six dimensions) . (16)



Figure(2)

Q.5 Refer Figure (3). It shows F.V and L.H.S.V of an object .Draw the oblique view when the receding axis is inclined at  $45^\circ$  to the horizontal. (16)



Figure(3)

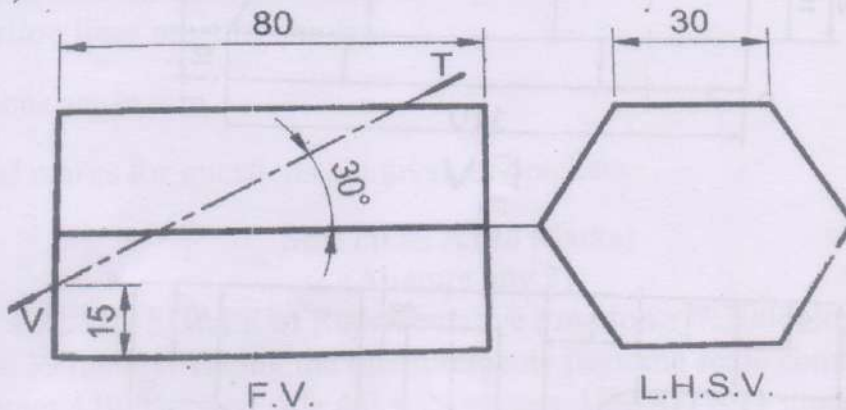


SECTION B (52 Marks)

(Attempt any two questions)

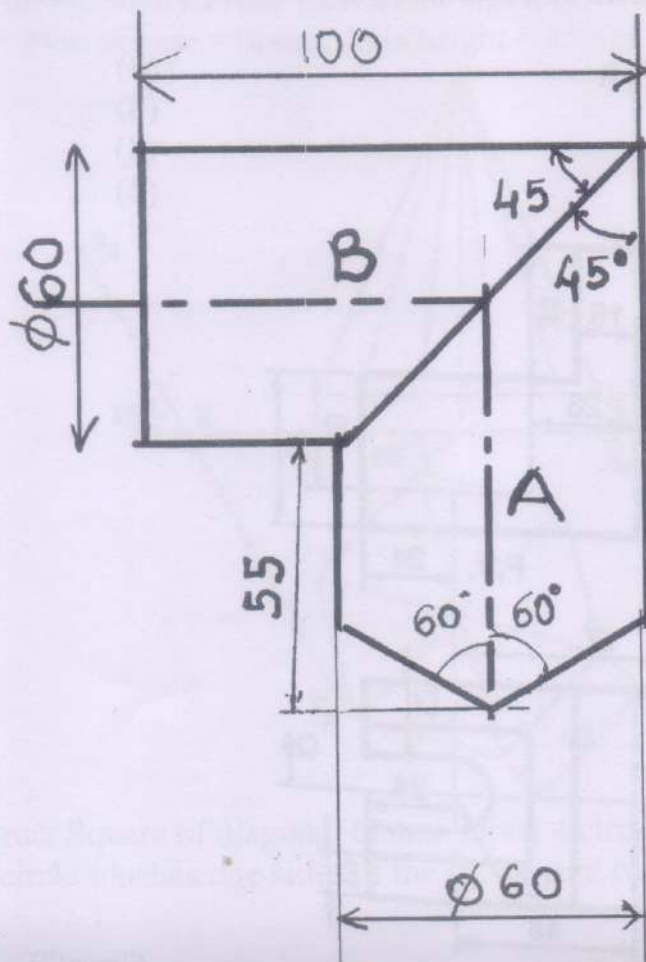
Q.6a) Refer Figure(4).It shows F.V and L.H.S.V of a Hexagonal prism with its axis parallel to H.P and parallel to the V.P. in First angle method of projection. It is cut by a cutting plane inclined at  $30^\circ$  to the H.P. and perpendicular to the V.P. as shown in the figure. Draw the (12)

- i) Front View (2)
- ii) Sectional Top View (5)
- iii)Sectional Left Hand Side View (5)



Figure(4)

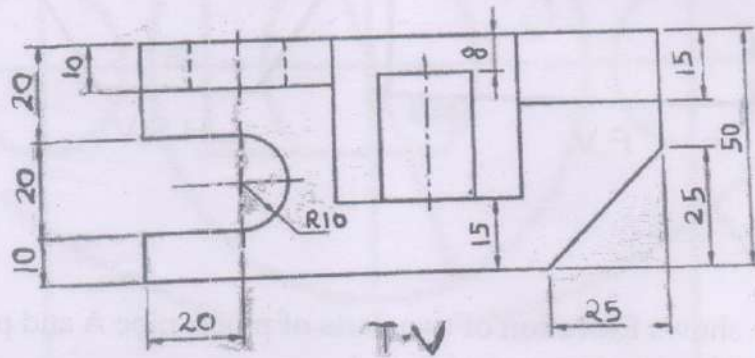
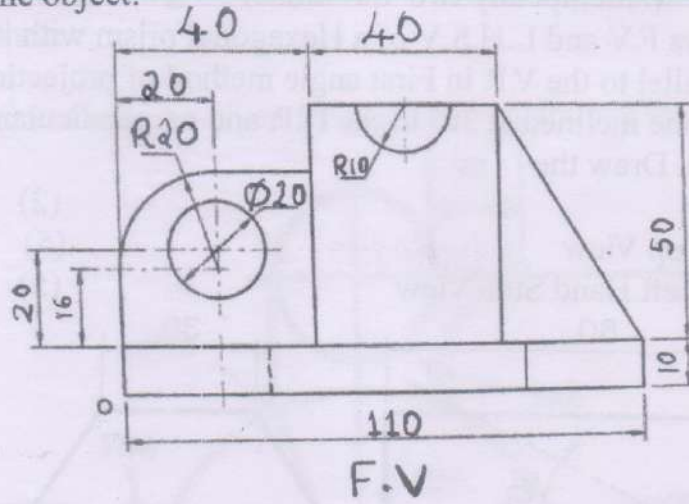
b) The Figure (5) below shows Elevation of two parts of pipes, pipe A and pipe joined together. Draw the development of Pipe A (14)



Figure(5)

Q7. Refer Figure (6) below. It shows F.V. and T.V of an object in First angle . Draw the Isometric view if the object.

(26)

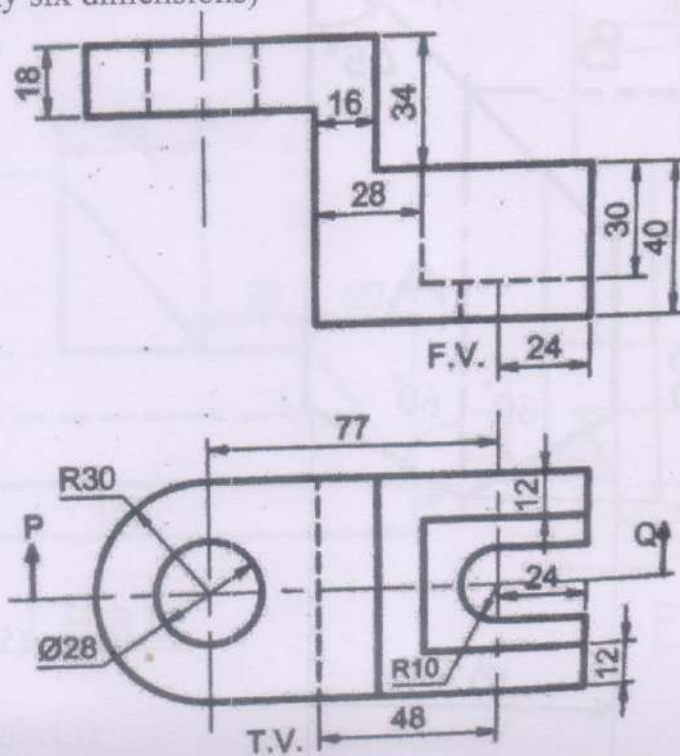


Figure(6,

Q.8 Refer Figure (7). It shows two views of a machine part. Draw in First angle method of projection

(26)

- a) Sectional Front View ALONG P-Q (8)
- b) Top View (8)
- c) Right hand side view (8)
- d)(Insert any six dimensions) (2)



Figure(7)