GREENLAWNS HIGH SCHOOL
TERMINAL EXAMINATION YEAR 2024 - 2025

SUBJECT : TECHNICAL DRAWING APPLICATIONS   CLASS : X
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 long enough to measure 2.1 decimeter.   (16)
Given R.F. = 2:5. Show the data and the working neatly. Taking the
Measurements from the scale constructed draw a square of diagonal
2.1 decimeter. Inscribe an octagon inside the square.

Q.2a) Construct a Triangle equal in area to the Pentagon of side 45mm.   (8)

   b) Inscribe 3 circles inside a circle of radii 55mm.   (8)

Q.3 Refer Figure (1). It shows two views of an Object. Draw the Oblique   (16)
View of the object. Use Receding Angle of 45°

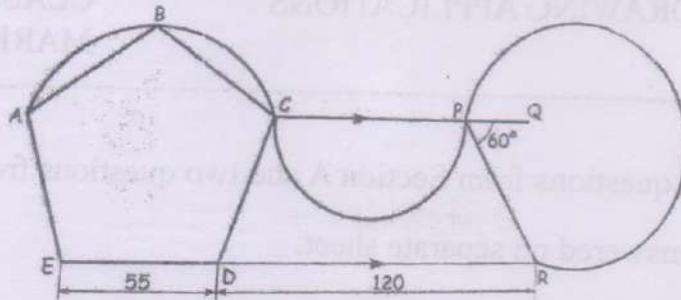R.H.S.V   FRONT VIEW
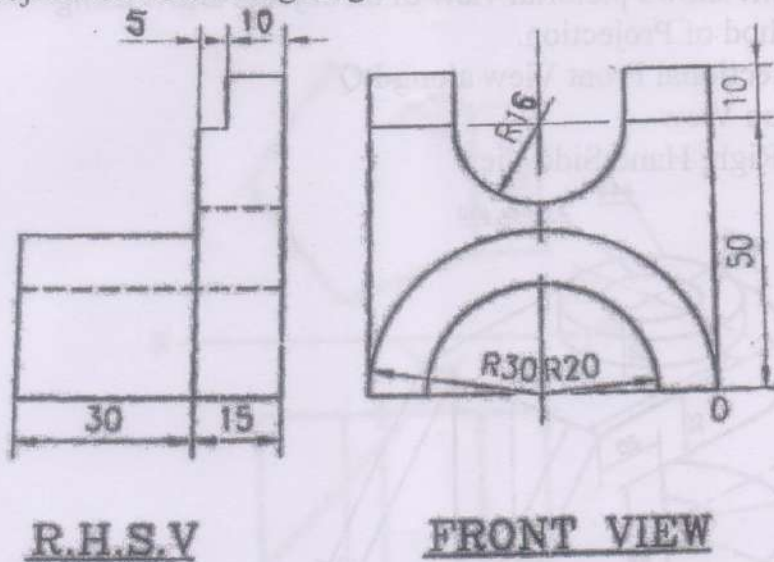
Figure(1)

Q.4a) Construct an ellipse of Major Axis 120mm and Minor axis 80mm using   (10)
Arcs of circles method.

b) Refer figure(2) below: Draw a smooth curve passing through (6)

Figure(2)

Q.5 Refer Figure (3). Copy the given figure. Insert any 6 important (16)
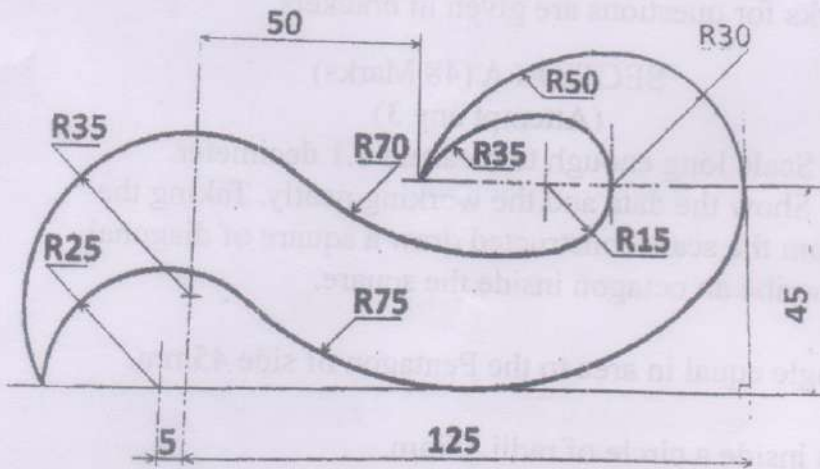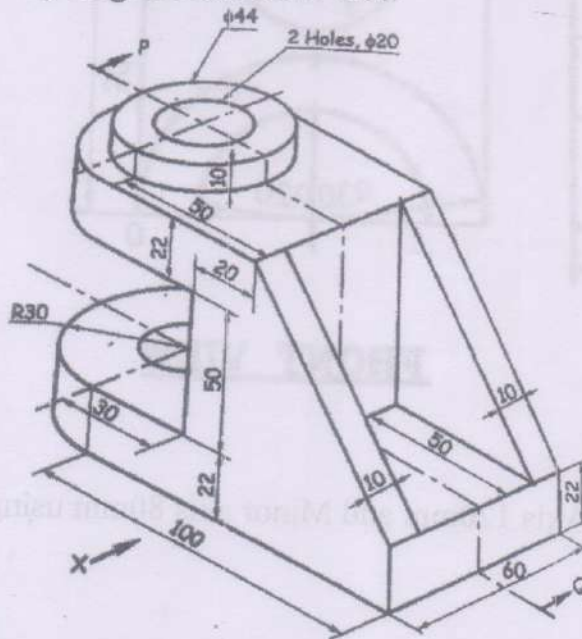Dimensions

Figure (3)

SECTION B

Attempt any 2

Q.6 Refer **figure (4)**.It shows pictorial view of an object . Draw using (26)
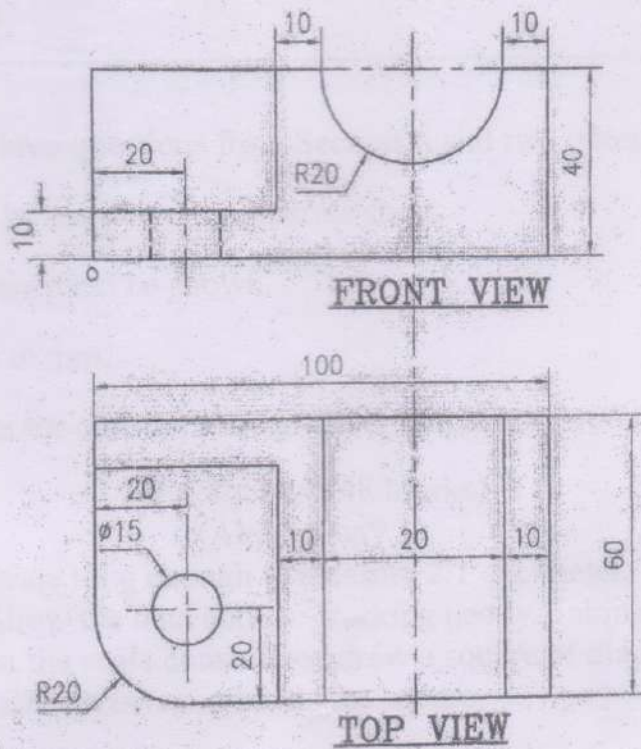First Angle method of Projection.

        i) Sectional Front View along PQ

       ii) Top View

       iii) Right Hand Side View

Figure(4)

p.t.o

Q.7 Refer Figure (5) Below: It shows two views of an object . Draw the (26)
Isometric View.

10 10

20 R20 40

10

o

FRONT VIEW

100

20
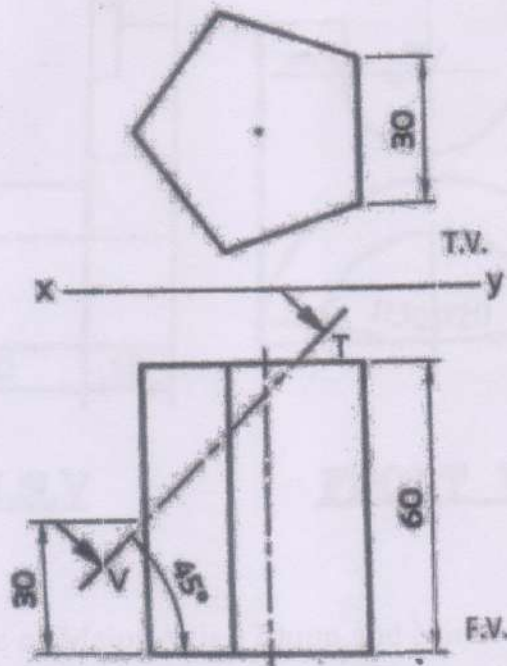ø15 10 20 10

60

20

R20

TOP VIEW

Figure(5)

Q.8 Refer Figure No .(6) below. It shows a pentagonal prism resting on its base (26)
on H.P. with one side of the base perpendicular to V.P in third angle method
It is cut by a cutting Plane inclined at 45° to H.P. as shown in the figure.
Draw   a) Front View   b) Sectional Top view c)Sectional L.H.S.V
c) True Shape of Section   d) Development of the retained portion.

30

T.V.

x —————————————— y
T

60

30 V 45°

F.V.

Figure(6)