

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2022 - 23
TECHNICAL DRAWING APPLICATIONS

CLASS : IX
TIME : 3 HOURS

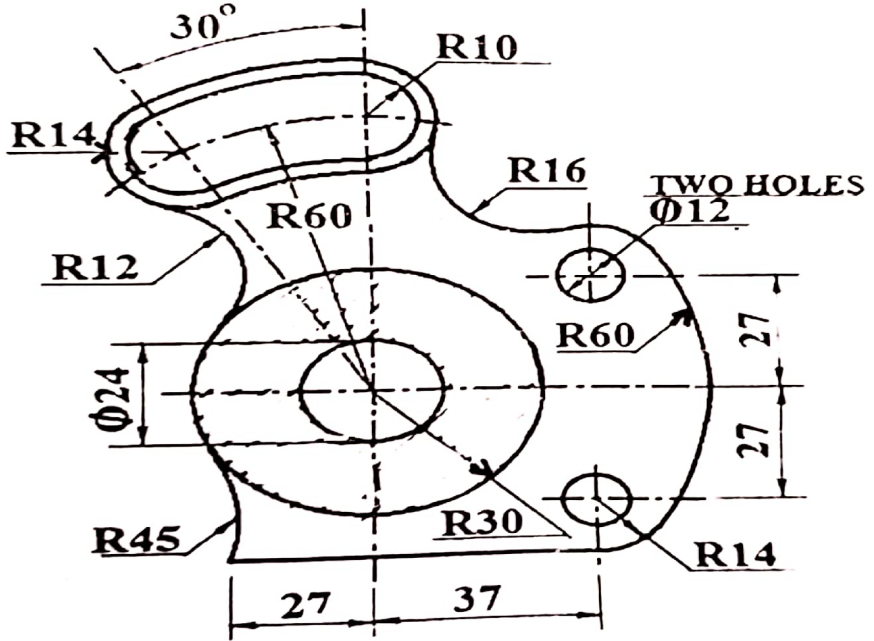
MARKS : 100

Instructions:

- You must attempt 3 questions from Section A and 2 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 (60Marks)
(Attempt any 3)

Q.1 Refer Figure(1) below. Copy the given figure. Insert any six dimensions . (20)



Q.2a) Construct an ELLIPSE by CONCENTRIC CIRCLE METHOD (14)

Given: Major Axis = 120mm
Minor Axis = 70mm

Q2b) Construct a Pentagon of side 50mm using the General Method. Show all Construction neatly. (6)

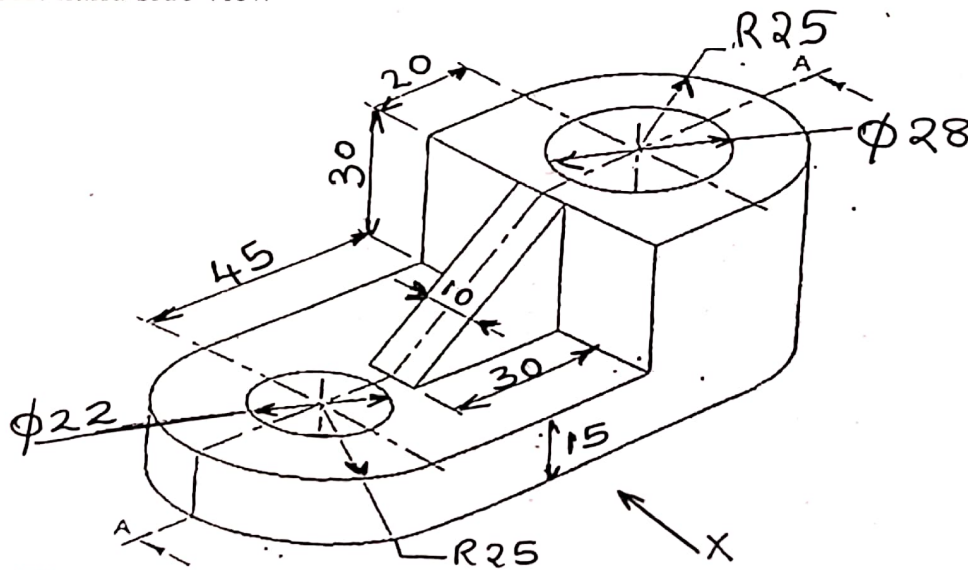
p.t.o

- Q.3a) Draw an angle $\angle ABC = 45^\circ$. Draw a circle of radius 25mm touching AB and BC (12)
draw another circle of bigger radius touching the first circle externally and also touching AB and BC.
- Q.3b) Construct an octagon whose distance across flats is 95mm. Measure the side (8)
of the octagon.
- Q.4 a) Construct a PARABOLA of base length 110mm, Axis height= 55mm using (12)
OBLONG METHOD.
- b) Draw Transverse common tangent to two circles of radii 20mm each and (8)
distance between their centers is 105mm. Measure and record its length.
- Q.5a) Draw a hexagon of side 35mm. Describe six circles outside the hexagon such (14)
that each circle touches one side of the hexagon and two other circles.
- b) Find the Circumference of a circle of radii 28mm . Measure and record it's (6)
length.

SECTION B (40 Marks)

(Attempt any 2)

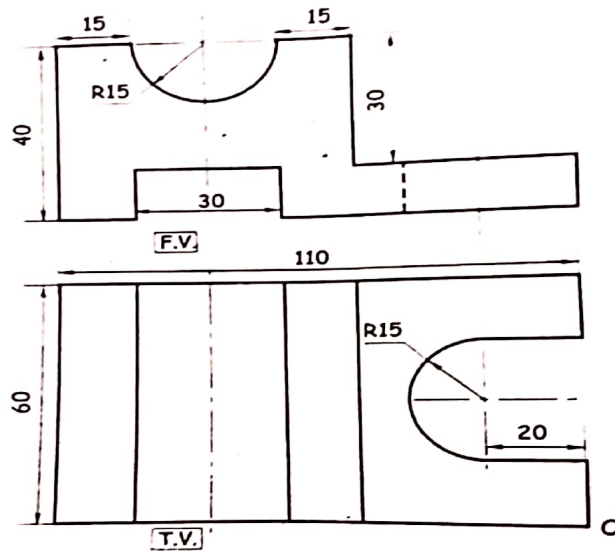
- Q.6 Refer Figure (2) below. Draw using First Angle method of (20)
projection
- a. Front View
 - b. Top view
 - c. Left hand side view



Figure(2)

Q.7 Refer Figure (3) below. It shows Front view and Top view of an object in First angle method. Draw the Isometric view. Do not insert any dimensions. Mention 'o' and 30°

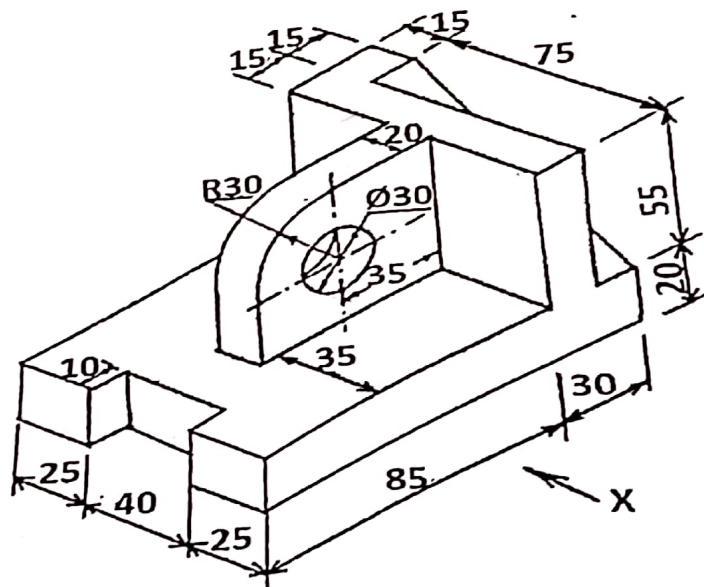
(20)



Figure(3)

Q.8 Copy the given Isometric figure given below in Figure (4). Do not insert any Dimensions. Mention 'o' and 30°.

(20)



Figure(4)