

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION 2023-24
TECHNICAL DRAWING APPLICATIONS

TIME : 3 HOURS

CLASS : IX
MARKS : 100

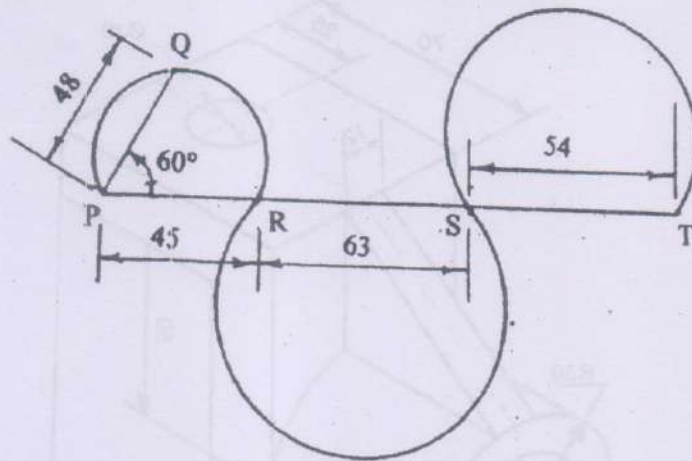
Instructions:

- 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.1a) Construct an ELLIPSE having Major Axis = 125mm and Minor Axis = 70mm Using OBLONG method (16)
- Q.2a) Construct Direct Common tangent and Transverse Common tangent to two circles of radii 55mm and 20mm respectively and distance between the centres 108mm. Measure and record the length. (12)
- b) Construct a Hexagon whose distance across flats is 70mm. (4)
- Q.3a) Construct a Triangle of side 85mm. Draw 3 circles inside the triangle such that each circle touches two sides of the triangle and two other circles. (10)
- b) Refer **Figure (1)**. Draw a continuous arc passing through points P,Q,R,S and T as shown in the figure. (6)
- Given $PQ = 48\text{mm}$, $PR = 45\text{mm}$, $RS = 63\text{mm}$, $ST = 54\text{mm}$.



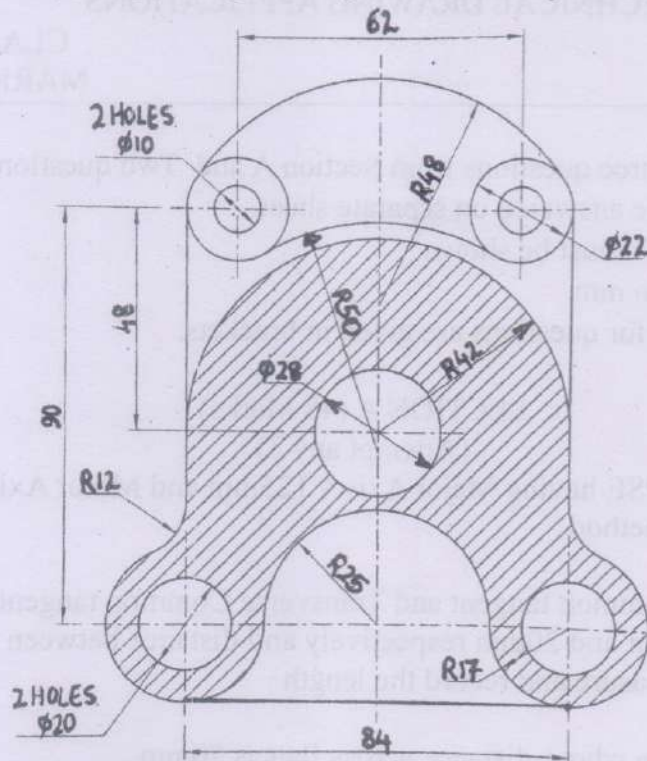
Figure(1)

- Q.4 Construct a PARABOLA of base length = 70mm and axis height = 85mm Using TANGENT method (16)

p.t.o

Q.5 Refer Figure (2). Copy the given Figure . Insert any six dimensions

(16)



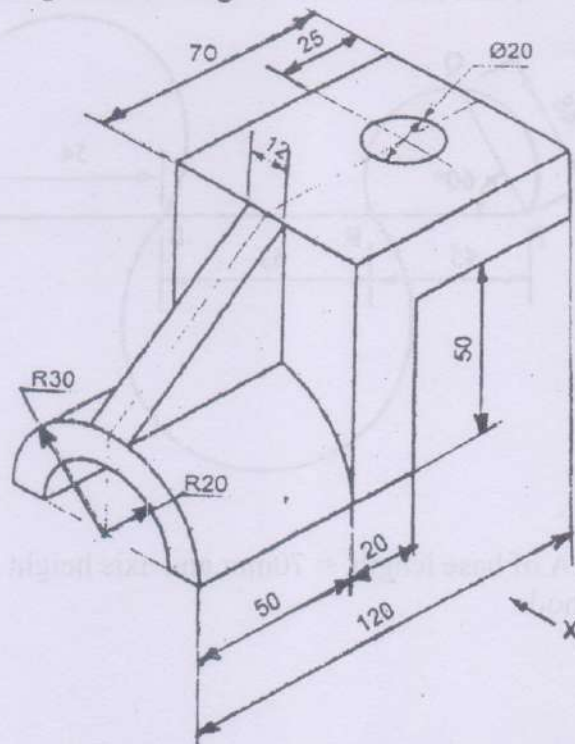
Figure(2)

SECTION B (52 Marks)
(Attempt both the questions)

Q6. Refer Figure (3) Draw using First Angle Method of projection

(26)

- a) Front view (8)
- b) Top view (8)
- c) Left hand side view (8)
- d) Dimensioning and labeling (2)

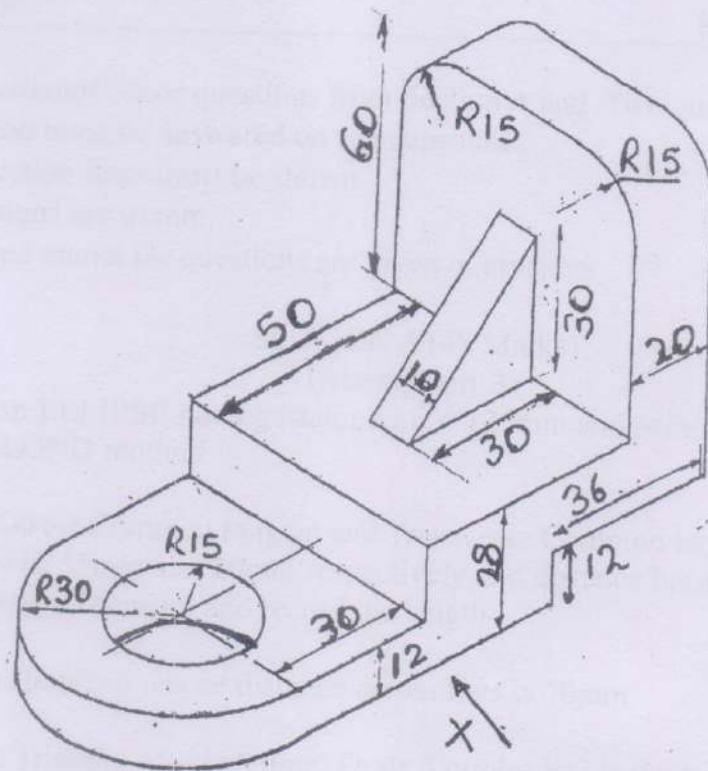


Figure(3)

p.t.o

Q7. Refer Figure (4). Copy the Isometric Figure given below.
Do not Insert any dimensions.

(26)



Figure(4)