

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2017-2018

SUBJECT : TECHNICAL DRAWING APPLICATIONS
TIME : 3 HOURS

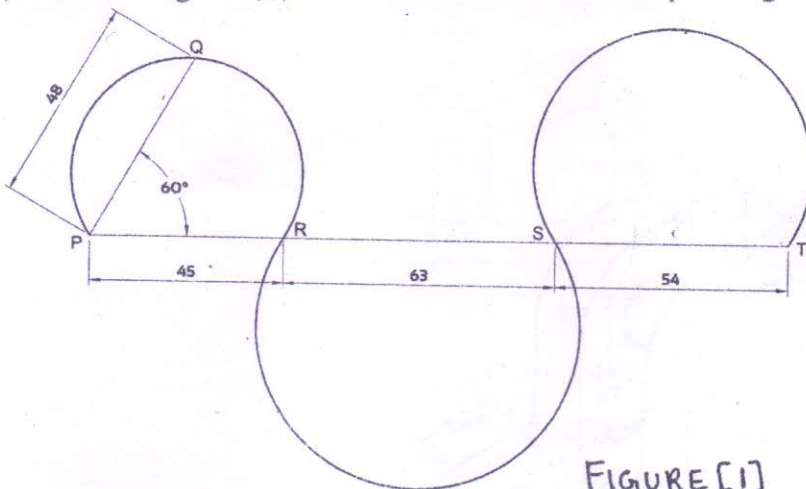
CLASS : IX
MARKS : 100

Instructions:

- You must attempt three questions from Section A and two questions from Section B.
- Each Section must be answered on separate paper.
- 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 a) Construct a circle of diameter 107mm . Inscribe a pentagon in it. Use of a protractor not permitted. (8)
- b) Draw a Parabola using OBLONG method . Given Base length = 120mm and Axis height = 80mm. (8)
- Q.2 a) Draw a square of diagonal 90mm . Construct four circles inside the square touching one side of the square and two other circles. (8)
- b) Construct transverse common tangent to two circles of radii 40mm each and distance between their centres 110mm. **MEASURE & RECORD IT'S LENGTH.** (8)
- Q.3 a) Refer Figure (1) . Draw a continuous arc passing through P,Q,R,S,and T (10)



PQ = 48 mm .
PR = 45 mm .
RS = 63 mm .
ST = 54 mm .

FIGURE [1]

- b) Construct an Octagon whose distance across Flats is 90mm. Mention the side of the octagon .Measure the side of the octagon and record it. (6)
- Q.4 a) Construct a hexagon of side 30mm. Draw six circles outside the hexagon such that each circle touches one side of the Hexagon and two other circles. (10)
- b) Draw a circle of radius 32mm. Find the circumference of the circle by geometrical means. Mention the length. (6)

Q.5 Refer Figure (2). Copy the given figure showing clearly all constructional details. (Insert any 4 dimensions)

(16)

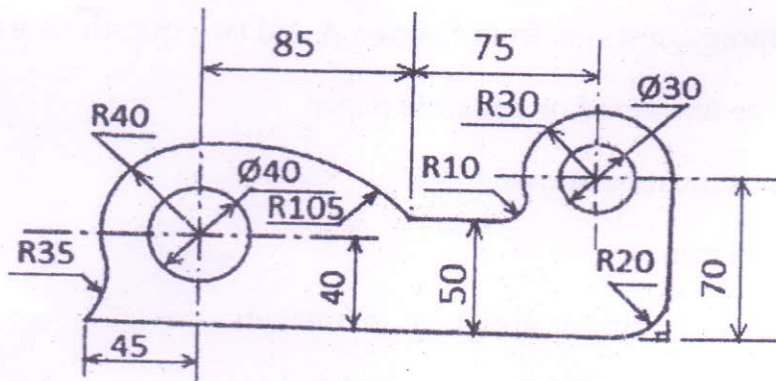


Figure [2]

SECTION B (52 Marks)

(Attempt any two questions)

- Q6. Refer Figure (3). Draw using FIRST ANGLE METHOD OF PROJECTION (26)
- Front view (8)
 - Top View (8)
 - Right hand side view (8)
 - Dimension and Labelling (2)

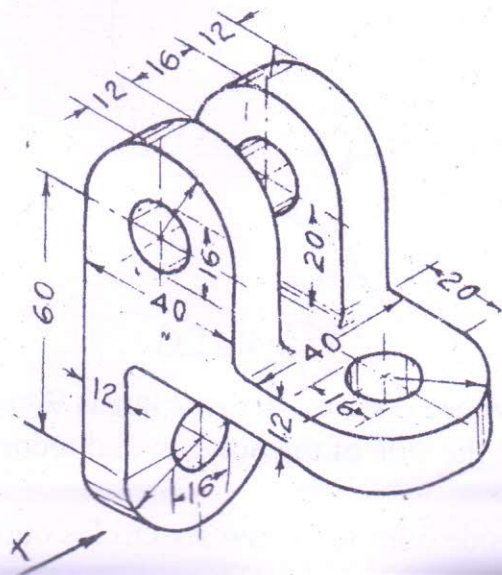


FIGURE [3]

- Q7. Refer Figure (4). It shows Isometric view of an object. Copy the given figure. Insert Length, Width and Height . (26)

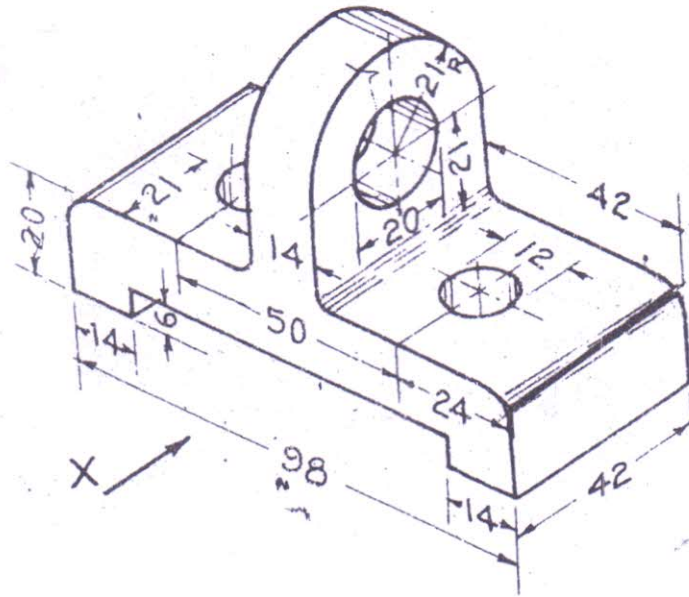


FIGURE [4]

- Q8. Refer Figure (5). It shows Front view and Top view of an object. Draw the Isometric view of the object taking 'o' as the origin . Insert Length, Width and Height. (26)

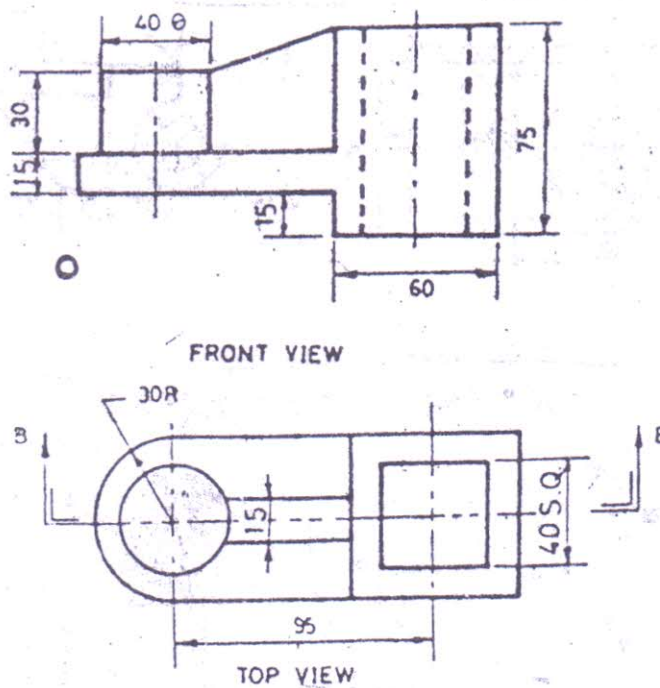


FIGURE [5]