## GREENLAWNS HIGH SCHOOL **TERMINAL EXAMINATION YEAR 2024-25**

TECHNICAL DRAWING APPLICATIONS CLASS : IX TIME :3 HOURS MARKS : 100 Instructions: You must attempt 4 questions from Section A and one (Compulsory) question from Section B compulsory · 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 (80Marks) (Attempt any 4) Q.1a)Construct a pentagon inside a Circle of radii 55mm. Mention the side of the (10) Pentagon. (Use proper construction) b) Draw a Triangle of side 85mm. Draw three circles inside the square such that (10)each circle touches two sides of the triangle and two other circles. Q.2 a) Draw Three Circles inside a Hexagon of side 60mm, such that each circle (12)touches One side of the Hexagon and two other circles. b) Construct a Triangle PQR of Perimeter 210mm and sides PQ:QR:RP are (8) in the ratio of 3:5:4. Take the largest side as the base. Write down the measurements of sides PQ, QR, RP. Q.3a) Construct a Transverse Common Tangent to two circles of radii 40mm (10)each and distance between their centres 115mm. Measure and record its length. b) Draw an Equilateral Triangle ABC of side 40mm. Construct (10)i. On side AB - Square ii. On side BC - A regular Pentagon iii. On side CA - A regular Hexagon Q.4 a) Draw 5 circles outside a pentagon of side 35mm.

b) Construct an Octagon whose distance across flats is 85mm.

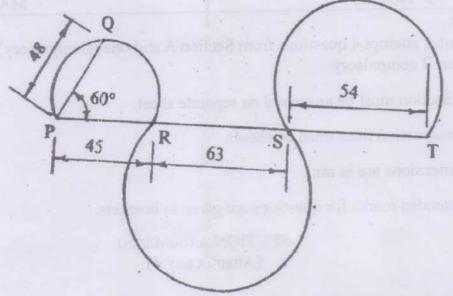
Mention the side of the Octagon

(14)

(6)

Q.5 a) Draw a smooth curve passing through points A,B,C,D,E As shown in Figure(1) below:



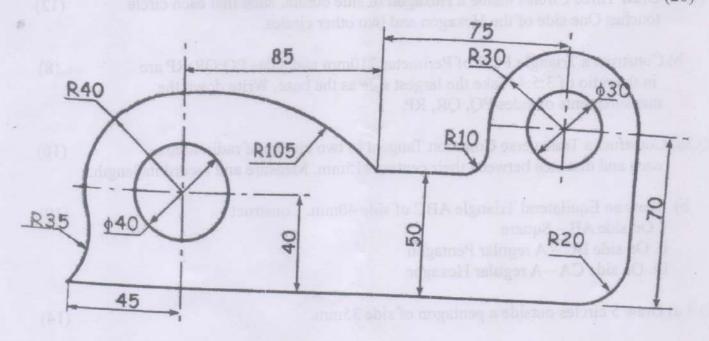


b) Find the Circumference of a circle of radii 28mm.. Measure and record it's length.

(8)

## SECTION B (20 Marks) (Q6 compulsory)

Q.6 Refer Figure (2). Copy the given figure. Insert any six dimensions. (20



Figure(2)