GREENLAWNS HIGH SCHOOL
TERMINAL EXAMINATION YEAR 2024 - 25

SUBJECT :MATHEMATICS **CLASS: VII**
TIME : 2 Hours **MARKS:80**

INSTRUCTIONS

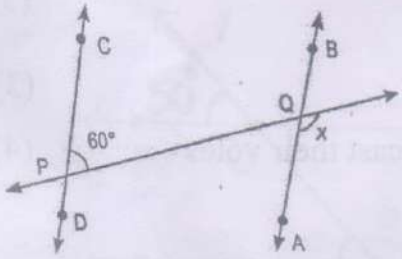
The time given at the head of the paper is the time allotted for writing the paper.
Attempt all questions in Section A and Section B.
Calculation to be shown on the same page as Numerical neatly
For constructions show all constructions clearly.

Section A (40 Marks)

Attempt all the questions

Q1. Choose the correct answers to the questions from the given options [10]
(Do not copy the questions, Rewrite the correct options with the alphabet a,b,c,d)

i. In the figure given below, what is the value of x?



(a) 75° (b) 105°
(c) 120° (d) 135°

ii. Convert 0.003 as percent?
(a) 0.03% (b) 0.003%
(c) 0.3 % (d) 30 %

iii. The difference between a Straight angle and a Right angle is ?
(a) 90° (b) 180°
(c) 270° (d) 10°

iv. If Rohan buys a product for ₹1280 and sells it for ₹1500. The profit is?
(a) ₹120 (b) ₹200
(c) ₹220 (d) ₹180

v. Multiply $(-5xy)$ and $(-3yz)$ we get ?
(a) $-15x\,y^2z$ (b) $15xyz$
(c) $-15x^2yz$ (d) $15xy^2z$

vi. The coefficient of mn in $-5mn^3$ is ?
(a) $-5n^2$ (b) $5mn$
(c) $5n^2$ (d) $5mn^2$

vii. If 70% of x is 14 minutes , then x = _____ ?
(a) 15 minutes (b) 25 minutes
(c) 18 minutes (d) 20 minutes

viii. Which of the following are supplementary angles?

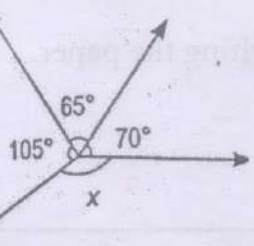
(a) 163°, 13° (b) 83° , 7°

(c) 50°, 130° (d) 140° , 35°

ix. In the figure below, Find the value of x?

(a)50° (b) 120° (a) 50°

(c)130° (d) 25°



x. If $p - 10 = -16$. Then the value of p is ?

(a) 6 (b) -6

(c) 10 (d) 26

Q2.

A) Construct an angle of 75°. (Use ruler and compass only.) (3)

B) Divide : $(8x^2 - 8x - 30)$ by $(2x + 3)$ (3)

C) In an election 60% votes were casted. If 2000 people did not cast their votes (4)

Find a) The total number of votes that were to be cast

b) The number of votes actually cast

Q3.

A) A dealer sells a washing machine for ₹25,000. If he made 25% profit on the sale (3)
What was the cost price of the washing machine.

B) If x ° and $(x + 50)$°are complementary, Find the value of x (3)

C) Solve: (4)

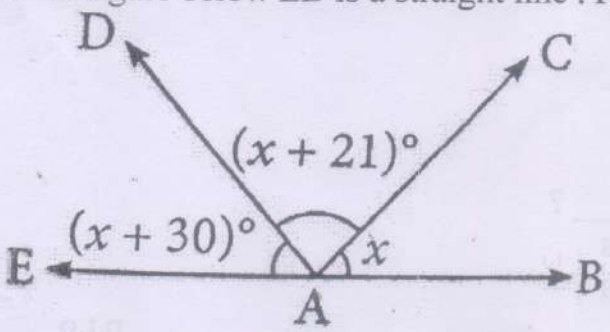
$$\frac{x-3}{4} + \frac{x+4}{5} - \frac{x-8}{10} = 4$$

Q4.

A) 30% of an angle is the complement of 60°. Find the angle? (3)

B) Evaluate: $(12p^2 - 6pq + 3q^2)(-2pq)$ (3)

C) In the figure below EB is a straight line . Find the value of x , $\angle EAD$, $\angle DAC$. (4)



SECTION B(40MARKS)

(Attempt all questions)

Q5.

A) Divide: $21a^3b^3 + 35a^4b^2 - 56a^2b^4$ by $-7a^2b^2$ (3)

B) The C.P. of an article is 80% of its S.P. Find the Loss or Gain as a percent on the whole? (3)

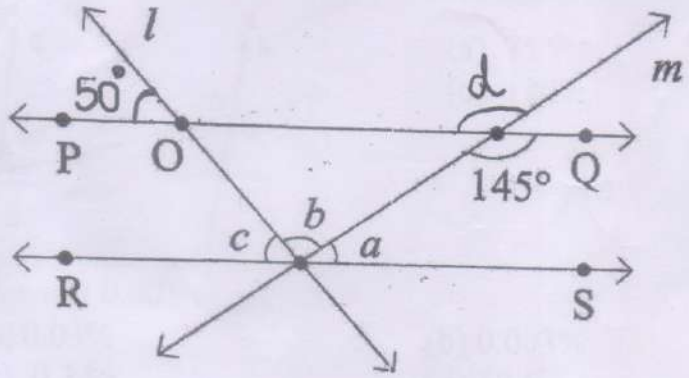
C) Construct an angle of 135°and bisect the angle. (Use ruler and compass only) (4)

Q6.

A) The price of a car increased from ₹1,25,000 to ₹1,40,000. Find the percentage Increase in the price of the car. (3)

B) Simplify: $\left(\frac{2}{3}x + \frac{4}{3}y\right)\left(\frac{2}{3}x - \frac{4}{3}y\right)$ (3)

C) In the figure below line PQ // RS, find angles a,b,c,d (4)



Q7.

A) If the C.P. of 20 watches, all of the same kind is equal to the S.P. of 25 watches, Find the Loss or gain as percent. (3)

B) $6\frac{1}{4}\%$ of a number is 0.25. Find the number. (3)

C) Solve: $4(x-4) + 6(x+4) = 6(x-4)$ (4)

Q8.

A) What must be subtracted from $4x^3 - 3x^2 + 6x - 5$ to obtain $2x^3 + x^2 - 2x + 1$. (3)

B) What number when decreased by 20% becomes 240? (3)

C) State whether the following is a monomial, binomial or a trinomial (4)

i. $ab^2 + ba^3 + 3b^2a + 29$

ii. $4 - 2x \div 1$

Evaluate the degree of the following polynomials

i. $3y^2 + 2z + 4xyz$

ii. $x^2yz + x^3 + y^3 + z^3 + y^2z^2x$