

GREENLAWNS HIGH SCHOOL  
FINAL EXAMINATION YEAR 2022-23

SUBJECT : MATHEMATICS  
TIME : 2 Hour

CLASS: VI  
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

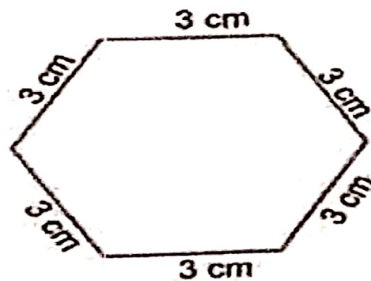
Section A (40 Marks)

Attempt all the questions

Q1 . Fill in the Blanks .(Write only Answers)

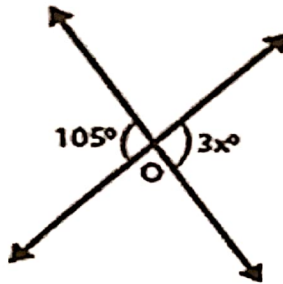
[10]

- i. Insert =, < or >  $\frac{1}{10}$  \_\_\_\_\_  $\frac{1}{5}$
- ii.  $11 \frac{21}{1000}$  when written in decimal form is \_\_\_\_\_
- iii.  $\frac{5}{8}$  expressed in percent form is \_\_\_\_\_
- iv. Complement of  $(x - 20)^\circ$  is \_\_\_\_\_
- v. 20 minutes : 1 hour expressed in its simplest form is \_\_\_\_\_
- vi. Divide :  $-6x^2y$  by  $-4xy^2$  \_\_\_\_\_
- vii. Add:  $5a, 2a, -3a, 4$  \_\_\_\_\_
- viii.  $1.005 \times 0.04 =$  \_\_\_\_\_
- ix. If  $3 - x = 12$  then  $x =$  \_\_\_\_\_
- x. The perimeter of the hexagon below is \_\_\_\_\_



Q2.

- A) An office starts at 10a.m and closes at 5p.m with a lunch break of 45mins in between . Find the ratio of : (3)
- i. Lunch break to the total time spent in office
  - ii. Lunch break to actual working hours
- B) Refer figure below. Find: the value of  $x$  (2)



- C) Take away  $2a + 3b - 4ab$  from  $7a - 3b + 4ab$  (2)
- D) A field is rectangular in shape with breadth 15m and length 21m. Find the cost of fencing the field at the rate of Rs. 55 per metre. (3)

Q3.

- A) Construct  $\angle ABC = 60^\circ$  . Bisect the angle (Use ruler and compass ) (3)  
Show all construction neatly.
- B) A book is priced at Rs.1595 . If the dealer decreases the price by 10%. What is the new price of the book? (3)
- C) Solve: (4)  
 $11(2x + 1) - 5(x + 4) = 9$

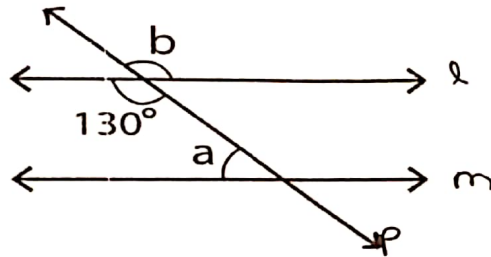
Q4.

- A) Construct  $\angle PQR = 135^\circ$  using ruler and compass . (3)
- B) I purchased 2.5Kg of potatoes and 4.750Kg of onions. Some onions were lost In the transit, and on reaching home, I found that was left with only 5.645Kg of Vegetables. What quantity of onions did I loose? (3)
- C) The perimeter of a square is 200 m. Find: (4)
- i. Its each side
  - ii. Its area

SECTION B(40MARKS)  
(Attempt all questions)

Q5)

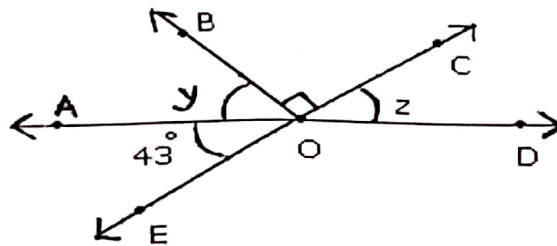
- A) In the figure drawn below line  $l$  is parallel to line  $m$ . It is cut by a transversal  $p$  Find the values of i)  $a$  and ii)  $b$ . (2)



- B) If the measures of two supplementary angles are  $(x + 7)$  and  $(2x + 11)$ . Find the value of  $x$  and hence find each angle (4)
- C) Express the following ratios in their simplest form: (2)
- $3\frac{1}{2} : 4\frac{3}{4}$
- D) Draw a line segment  $AB = 7\text{cm}$ . Construct the perpendicular bisector of the Line segment using ruler and compass. (2)

Q6

- A) In a plot of area  $5000\text{ m}^2$  only  $3250\text{ m}^2$  is allowed for construction. What percentage is to be left without construction? (2)
- B) In the Figure below  $AOD$  and  $EOC$  are straight lines.  $AOE = 43^\circ$   $BOC = 90^\circ$ . Find i.  $\angle AOB$  ii.  $\angle COD$  (4)
- iii. Obtuse  $\angle EOD$  iv. Reflex  $\angle BOD$



- C) The Sum of rupess 43,400 is to be divided between Mala, Rhea and Tina such that Mala gets double of what Rhea gets and Rhea gets The double of what Tina gets. Find out the amount which Mala, Rhea and Tina get? (4)

Q7)

A) i. Express the first quantity as a percent of the second: (2)

400g , 6Kg

ii. Find the value of :

12 % of 96 Km

B) Simplify: (3)

$$\frac{4}{5} \text{ of } \frac{10}{11} \div \frac{9}{11} + \left[ \frac{2}{3} + \frac{3}{4} \right]$$

C) Multiply: (3)

$$(2x + 3y) (3y - 4x)$$

D) Solve: (2)

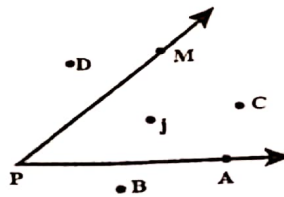
$$2x - 0.8 = 23.2$$

Q8)

A) Refer figure below. Name the points: (2)

i. In the interiors of  $\angle MPA$

ii. In the exterior of  $\angle MPA$



B) A rectangular piece of paper has its area =  $60\text{cm}^2$  and length = 12cm. Find its Perimeter (4)

C) How many packets are made , if 22.5Kg of almonds are put into packets weighing 0.9 Kg each (2)

D) Subtract: (2)  
 $-5x$  from  $-12x$