GREENLAWNS HIGH SCHOOL

FINAL EXAMINATION 2023-24

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

The paper consists of two sections **A & B.**

Do not copy the questions.

Attempt all the questions from both the sections.

Show all steps with necessary calculations on the same page.

Rough work must be done on the same page on the right-hand side.

SECTION-A

QI Fill in the blanks. [Write answers only] 10m

1. Base of a triangle is 5 cm and height is 6 cm. Its area is _____.
2. S.I on ₹ 200 for 3 years at 6% per year is _____.
3. The value of $((8^0 - 3^0) \times 5^0 =$ _____.
4. If 2b-14=8, then b=_____.
5. The perimeter of an equilateral triangle whose each side is 19 cm is_____.
6. $(3x^2)^2\ (xy)^{-2} =$ _____
7. If 1000: x=2:25, the value of x=_____.
8. Simplest form of 200m:5km is_____.
9. $\left(-\frac{3}{4}\right)^3$=_____
10. Cost of one dozen oranges is ₹72. Cost of 3 dozen oranges will be _____.

QII Solve the following.

A Choose the correct option.

1. The solution of $4x - 3 = -6$ is 1m

a) $-\frac{2}{9}$ b) $\frac{2}{5}$

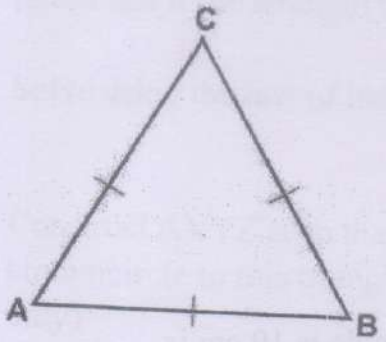
c) $\frac{3}{4}$ d) $\frac{-3}{4}$

2. What would be the simple interest earned in 4 years on a principal of ₹18440 at the rate of 15% per annum. 1m

a) ₹12000 b) ₹11064

c)₹12020 d) ₹13020

3. In the given figure, AB=AC=BC, then the value of each angle is equal to 1m



a) 40° b) 60°

c) 70° d) 90°

4.The ratio of Sana's income to her savings is 4:1. If her income is ₹1000, her savings are 1m

a) ₹500 b) ₹250

c) ₹350 d) ₹200

5. Cost of 30m of cloth is ₹360. Cost of 40m of cloth is 1m

a) ₹480 b) ₹240

c) ₹360 d) ₹420

B Calculate

1. A person pays ₹180 to buy 5 kgs of rice. 2m
   a What is the cost of 1 kg rice?
   b How much quantity of rice can be bought for ₹360?

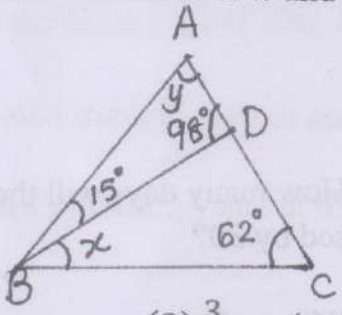
2. The sum of three consecutive numbers is 48. Find the numbers. 3m

SECTION-B

QIII

1. Divide 140 into two parts, so that the greater part is 6 times the smaller part. 2m

2. Find the value of x and y in the following figure. 4m



3. Evaluate: $\left(\frac{3}{5}\right)^3 \times \left(\frac{9}{25}\right)^2 \times \left(\frac{125}{27}\right)^2$ 4m

QIV

1. What is the rate of interest if ₹2500 amounts to ₹6250 in 5 years. 3m

2. The difference between two complementary angles is 30°. Find the angles. 3m

3. Shaina and Reena complete a certain work in 15 hours and 20 hours respectively. 4m
   a Find work done by both in 5 hours.
   b Work left after both have worked together for 5 hours.

QV

1. A car uses 40 liters of diesel for 320 km. How many liters of diesel is required for 480km? 2m

2. A school collected ₹21,000 for charity. It was decided to divide the money between an orphanage and a blind school in the ratio of 3:4. How much money did each receive? 4m

3. Construct an equilateral ΔMNO such that MN=5.5 cm. Construct an incircle to it and record its radius. (Use a compass and ruler only) 4m

QVI

1. If a: b=4:5 and b:c=6:7, find a: b: c. 3m
2. The simple interest earned on a certain sum in 5 years is 40% of the sum. Find the rate of interest. 3m

3. A floor is 20m long and 30m wide. If it is covered with tiles measuring 300cm by 100 cm, Find the number of tiles required to cover the floor. 4m

QVII

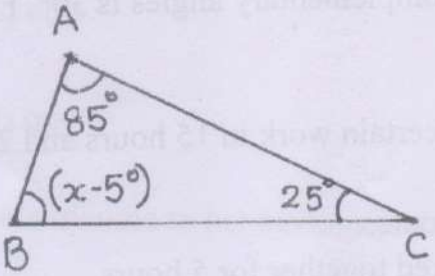
1. A canteen has ration for 90 students for 45 days. How many days will the same ration last if the strength of the students is decreased by 30? 3m

2. Solve using the law of indices: $(7^{178} \times 7^{22}) \div (7^{149} \times 7^{51})$ 3m

3. Construct ΔXYZ such that XY=7cm, YZ=5cm and XZ=6cm. Construct a circumcircle to this triangle and record its radius. (Use a compass and a ruler only) 4m

QVIII

1.



In ΔABC, find the value of x and measure of ∠B. 3m

2. Varun and Rohan together build a wall in 12 days. Varun alone can build it in 20 days.
   In how many days can Rohan build it? 3m
3. Raman is 4 years older than five times the age of Rohan. If Raman is 49 years old, calculate the age of Rohan. 4m