

GREEN LAWNS HIGH SCHOOL

FINAL EXAMINATION 2020-21

SUBJECT: MATHEMATICS

CLASS: VII

TIME: 1 HOUR 15 MINUTES

MARKS: 40

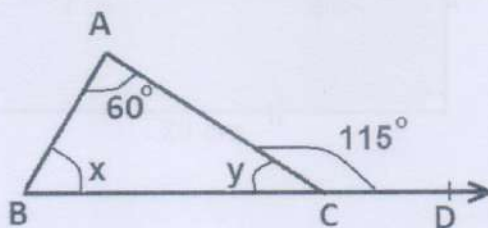
Note:

- All answers for this paper to be written on the composition sheet.
- You will not be allowed to write during the first 10 minutes. Use this time to read the paper carefully.
- The time given at the head of this paper is the time allowed for writing the answers.
- **Working must be shown** for all the questions.
- If needed, rough work must be done in rough work column only, besides the sum, on the same page.
- **All** the questions are **Compulsory**.
- Write your **Roll No., Name and Class-Div on the right hand side top corner on every page** of your composition-sheet.
- Leave a line after solving each sum.
- After you finish writing the paper, number all the pages, click bright and clear pictures, include all the pictures into **one PDF, rename that PDF with your Roll No., Name, Class-Div, math** and send it to your math teacher according to his/her instruction.

Question 1

(10)

- 1) Find the median and mode of: 45, 42, 44, 41, 45, 42, 43, 45, 41. (2)
- 2) Find the mean of first five multiples of 4. (2)
- 3) Find the value of x and y in the following figure. (3)



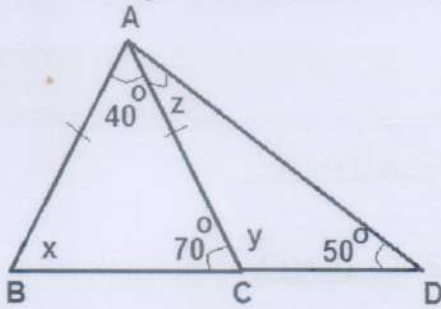
- 4) Subtract $3x^2 - 7xy + 8y^2$ from $-9x^2 + 8xy - 8y^2$. (3)

Question 2

(10)

- 1) Find the simple interest and the amount on Rs. 3450 for 5 years at 4 % p.a. (3)
- 2) Express 1296 in exponential form. (3)

- 3) The following $\triangle ABC$ is an isosceles triangle. Find the value of x , y and z . (4)



Question 3 (10)

- 1) Multiply: $(2a^2 + b)(3a^2 - b)$ (3)
- 2) The diameter of a circular ground is 42 m. Find the cost of fencing it at the rate of Rs. 90 per m. (Take $\pi = \frac{22}{7}$) (3)
- 3) Simplify using laws of indices and express your answer with positive index: (4)
 - i) $3p^2 \times p^7 \div p^3$
 - ii) $(a^2)^3 (x^2)^{-3}$

Question 4 (10)

- 1) The following data shows the ages (in years) of 20 athletes taking part in annual athlete meet. Prepare a frequency distribution table. (3)
 13, 12, 14, 11, 13, 15, 13, 12, 15, 13,
 14, 11, 13, 15, 13, 12, 14, 15, 13, 13.
- 2) A sum of Rs. 41,000 becomes Rs. 47,560 in 2 years. Find the rate of interest. (3)
- 3) Find the area of the shaded portion. (4)

