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Half Yearly Examination – (2019-20)

Class :- VII   *Max. Marks :-* 80
Subject :- MATHS   *Time Allowed :-* 3 hr

GENERAL INSTRUCTIONS :-

➢ Questions are divided into four sections.
➢ Read the questions carefully and write the answers in the answer sheets provided.
➢ Do not answer the questions randomly. Attempt all the questions of one section before moving on to another section.
➢ Do not write anything on the question paper.

SECTION A

A. Solve the following questions :   [1×10 = 10 marks]

   1) $96 \div 12 - 2 \times 3 =$ _____
   2) What must be added to (-26) to get (-18) ?
   3) Find :
      $2\frac{1}{2} \div 5\frac{1}{3} =$ _____.
   4) Find :
      $8\frac{1}{2} - 3\frac{5}{8} =$ _____.
   5) Find : $0.2 \times 316.8 =$ _____.
   6) The product of a rational number and its multiplicative inverse = _____.
   7) $\frac{39}{-91}$ in standard form is : _____.
   8) If $5^3 \times 5^7 = 5^k$, then k = _____.
   9) Subtract $(- 5y^2)$ from (y^2) .
   10) If $3x - 1 = 20$, then the value of x is = _____.

SECTION B

B. Solve the following questions :   [2 × 8 = 16 marks]

   1) Find the ratio of 30 days to 36 hours.
   2) If $8 : x :: 16 : 8$, then find the value of x.
   3) 6 bowls cost Rs. 90. What would be the cost of 10 such bowls ?
   4) Simplify $-5(x + y) +2(2x - y) + 4x - 7$.
   5) The sum of a number and 17 is 103 , then find the number.
   6) Add :- $x^2 + y^2$, $2x^2 - y^2 + 5$ and $-x^2 + 2y^2 - 4$
   7) Simplify $(3^5)^{11} \times (3^{15})^4 - (3^5)^{18} \times (3^5)^5$.
   8) The sum of two rational numbers is $\frac{-1}{3}$. If one of the numbers is $\frac{-11}{3}$, find the other number.

SECTION C

C. Solve the following questions :   [3 × 8 = 24 marks]

1) At Srinagar temperature was -5° C on Monday and then it dropped by 2° C on Tuesday. What was the temperature of Srinagar on Tuesday ? On Wednesday, it rose by 4° C. What was the temperature on this day ?

2) A rectangular sheet of paper is $8\frac{1}{2}$ cm long and $5\frac{2}{3}$ cm wide. Find its perimeter.

3) Rajeev covers a distance of 16 km in $3\frac{1}{5}$ hours, then how much distance will he cover in 1 hour ?

4) The side of an equilateral triangle is 5.7 cm. Find its perimeter.

5) Write the following rational number in descending order :

$$\frac{1}{3}, \frac{-2}{9}, \frac{-4}{3}, \frac{2}{3}$$

6) Simplify $\frac{3^5 \times 10^5 \times 25}{5^7 \times 6^5}$ and also find its reciprocal.

7) If z= 10, then find the value of z^3 - 3(z - 10).

8) Solve 3x -2(2x - 5) = 2(x + 3) - 8

SECTION D

D. Solve the following questions :   [5 × 6 = 30 marks]

1) (a) The ratio of milk and water in a mixture is 3 : 2. If the quantity of water in the mixture is 10 litres, then find the quantity of milk in the mixture.

   (b) Find the mean proportion between 20 and 5

2) (a) The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7 .The highest score is 87. What is the lowest score ?

   (b) If one- fifth of a number minus 4 gives 3 , then find the number.

3) (a) Subtract 3a - 4b - + 3c from the sum of 5a + 6b - 3c and 3a -2b +5c.

   (b) Simplify : $4x^2$ - 2xy + 12x - 8y + 10xy - 8x + $12x^2$ + 6y.

4) (a) Which number should be added to $\frac{-7}{8}$ so that it becomes $\frac{5}{9}$.

   (b) Represent $\frac{2}{3}$ on number line.

5) (a) Price of $15\frac{2}{5}$ litres milk is Rs 231, then find the price of 2 litres milk.

   (b) *a* is the number obtained by dividing - 161 by - 23 and *b* is the number obtained by multiplying 7 by 12. Find *a + b.*

6) 840 students were admitted in a school. $\frac{2}{7}$ of total number was that of girls and remaining was of boys. 40 girls and 80 boys took part in annual sports

   (i)   What fraction of total girls participated in sports ?

   (ii)   What fraction of total boys participated in sports ?

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BEST OF LUCK