MODEL QUESTION PAPER

MATH-I 9TH

MARKS 40

PREPARED BY: RIZWAN SAYYED

Q.NO.1 : Solve the following activity. 5

- 1) A= {1,2,3,4.....10} which type of set A?
 - i) Empty set ii) finite set iii) infinite set iv) universal set
- 2) The number 0.4 in p/q form is

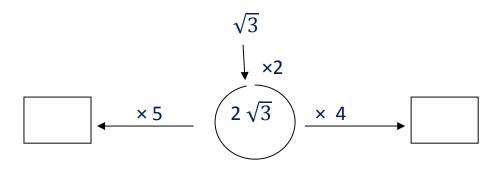
i)
$$\frac{2}{5}$$
 ii) $\frac{3}{1}$ iii) $\frac{3}{1}$ iv) $\frac{1}{25}$

- 3) Write degree of polynomial $2x^2+5x^3+7$
 - i) 1 ii) 3 iii) 5 iv) 0
- 4) whatis the ratio of 1mm to 1cm?
 - i) 1:100 ii) 10:1 iii) 1:10 iv) 100:1
- 5) If 6:5 = y : 20, then what will be the value of Y?
 - i) 15 ii) 24 iii) 18 iv) 22.5

(B) Attempt the following activity.

5

- 1) Set P is the first five multiple 6 write set in Roster form.
- 2) What is the mean proportional of 8 and 18?
- 3) Complete the web diagram

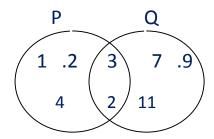


- 4) Find the value of polynomial $2x^2 + 2x$ if x = 1.
- 5) $N = \{2,4,6\}$ and $M = \{1,3,5\}$ then $M \cap N = ?$

Q.NO 2: Solve the following activity. (any 4)

8

1) Observe the following figure and write set P and set Q.



- 2) Fill the boxes Using rules of ratio and proportion $\frac{a}{3} = \frac{b}{4} = \frac{4}{3} = \frac{6}{4} = \frac{4+6}{3}$
- 3) To compare the surds complete the following activity.

$$7\sqrt{2} = \sqrt{49 \times 2} = \boxed{}$$

$$5\sqrt{2} = \boxed{} = \sqrt{75}$$

$$7\sqrt{2} \boxed{} 5\sqrt{3} \longrightarrow \text{(use > <)}$$

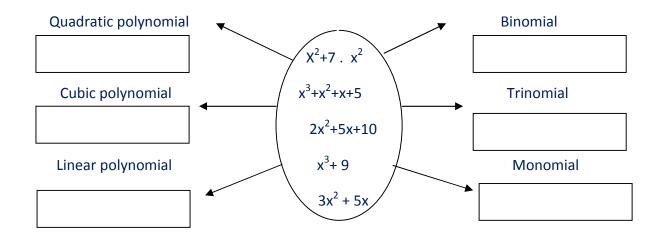
4) Poonam completed her running in7 mint 20 sec while Neelam completed same in 5 mint 5 Sec complete the following activity.

- 5) write the polynomial $x^3 3x^2 + 4x 8$ in coefficient form
- 6) Express the recurring decimal 0.555..... in $\frac{p}{q}$ form.
- 7) write the following statements in symbolic form.
 - i) $\frac{4}{3}$ is an element of the set Q ii) 2 is not an element of set N

Q.NO 3: complete the following activity (Any 3) 9

- 1) The ratio of two numbers is 31: 23 and their sum is 216. Find these numbers.
- 2) Rationalize the denominator $\frac{1}{\sqrt{7} + \sqrt{2}}$

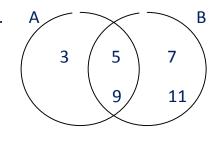
3) write the appropriate polynomials in the boxes.



- 4) The ratio of the present ages of Rehana and her motheris 2:7. After 2 years the ratio of their ages will be 1:3. What is Rehana's present age?
- 5) Observe the given Venn diagram and complete activity.

$$n (A) =$$
 $n (B) =$ $n (A \cap B) =$ $n (A \cap B) =$

verify
$$n(AUB) = n(A) + n(B) - n(A \cap B)$$

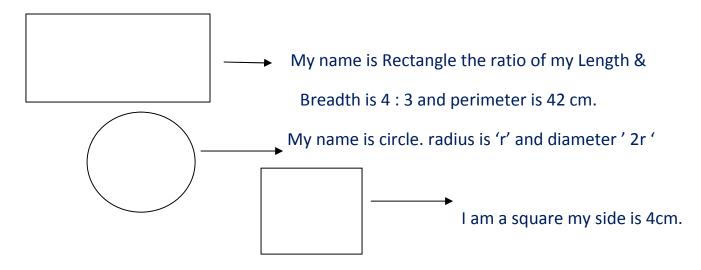


Q.NO. 4: complete the following activity.

(Any 2)

8

1) Observe the diagram and answer the following questions.



- i) Find the length and breadth of rectangle ii) write the ratio radius of circle to its diameter lii) What is the ratio of side of square to its perimeter?

- 2) In a class 9 students out of 28 have a dog as their pet animal at home 6 students have a cat as their pet animal.10 students have dog and cat both then how many students do not have a dog or a cat as their pet animal at home?
- 3) Divide the following polynomial by synthetic division method and linear division method Write the quotient and remainder.

$$x^4 + 2x^3 + 3x^2 + 4x + 5 \div x + 2$$

Q.NO.5: complete any one of the following activity.

Division B. answer the following question.

1) There are 32 boys and 24 girls in division A of standard IX and 28 boys and 21 girls in

5

- i) What is the ratio of number of boys to the number of girls in A division?
- ii) What is the ratio of number of boys to the number of girls in B division?
- iii) What is the ratio of number of boys to the number of girls in division A and B combined together?
- iv) What is the relation between all these ratio? Write your conclusion.
- v) With the help of above theorem complete fill in the blanks

a)
$$\frac{a}{3} = \frac{b}{4} = \frac{a+b}{a+b}$$

b)
$$\frac{x}{3} = \frac{y}{4} = \frac{z}{5} = \frac{\dots}{\dots}$$

2) Rahul's monthly salary is Rs. $2P^2 + P - 3$. His annual expenditure is Rs. $14P^2 + 6P - 10$ Find his annual savings.



PREPARED BY: RIZWAN SAYYED

HASHEMIAH HIGH SCHOOL MUMBAI

9029129888

VISIT www.rizwanhamnaw.blogspot.in