Time=2:30hr   M.M=80

NAME ……………………………….. ROLL NO ……………………………………… SECTION …………………………………..

(SECTION-A)

Q-01. What is a rational number? Define and give examples.

Q-02. Writ the formula of Heron's formula.

Q-03. Which is greater?

   (a) 3^2 or 2^3

Q-04. Define like and unlike term:-

Q-05. Write the co-efficient of:-

   (a) X^2 in $\frac{-5}{7}x^2 y$

Q-06. Subtract:-

   (a) $14x^2$ from $3x^2$

(SECTION-B)

Q-01. Add the following:-
   (a) 14xy, 19xy, -4xy   (b) $3x^2$, $-10x^2$, $4x^2$

Q-02. Find the value of $z^3-3(z-10)$, if z=10

Q-03. Is x=5 a solution of the equation $\frac{1}{2} \times \frac{x}{10}=2$?

Q-04. Divide 270 in the ratio:

   (a) 1:2:3   (b) 4:5

Q-05. Find the number :

   (a) Whose 10% is 24   (b) Whose $6\frac{1}{6}$% is 2

Q-06.Find

   (a) $33\frac{1}{3}$% of 456   (b) $12\frac{1}{2}$% of ₹ 24

(SECTION-C)

Q-01.Two number are in the ratio 7:4. If their sum is 55, Find the numbers.

Q-02. A cow is bought for ₹ 8500 and is sold at a loss of 3 % . Find the selling price of the cow.

Q-03. Calculate the time in Which ₹ 1250 would become ₹ 1375 at 4% rate at interest.

Q-04. The sum of two consecutive numbers is 175. Find the numbers.

Q-05. Solve the equation : $\frac{y}{5} - \frac{y}{6} = \frac{1}{30}$

Q-06. Simplify 38-2(5-8-3) ÷[2 {7+(-3)×(-4)}]

Q-07. Define Vertically opposite angles.

Q-08. Find the angles of a triangles which are in the ration 2:3:4

Q-09. In a △ PQR, if   P = 30° and   Q = 50°, Find the measure of   R

Q-10. How much is $x^3 - 2x^2 + x + 4$ greater then $2x^3 + 7x^2 - 5x + 6$

(SECTION-D)

Q-01. If you add 87 to an unknown numbers, your some will be 170. What is the unknown number.

Q-02. The area of the square is $18050 m^2$. Find the length of the diagonal.

Q-03. Raghu's rectangular plot measures 400m by 225. How many square meters of land should he buy more to make the area of his field equal to 10 hectare ?

Q-04. A door is 2.6m by 1.1m. Find the cost of painting both sides of the door at the rate of ₹ 20 Per square metre.

Q-05. The area of a right triangle whose base is 3cm is $6 cm^2$. Find the other two sides of the right triangle.

Q-06. The area of an equilateral triangle is $\sqrt[9]{3}\ cm^2$ and the length of each side is 6cm. Find the altitude of the triangle.

Q-07. A diagonal of a quadrilateral is 25cm. Two perpendiculars drawn to it from opposite vertices are 10.2cm and 11.8cm.Find the area of the quadrilateral.

Q-08. The sides of a parallelogram are 4cm and 3cm.It the altitude corresponding to the base 4cm is 1.8cm,What will be the length of the altitude corresponding to the base 3cm ?