___

<u>**Note**</u> **: i. All answers to be written in the answer booklet provided. Show working wherever required.**

     ii. Do not copy the questions

     iii. Rough work must be done on the same page as the rest of the answer.

Q.1).A. Choose the correct option for the following questions given below:

(10m)

1. The co-efficient of $-7p$ in $-7p^4q^2$ is

(a) p^2q^3 (b) $7p^3q^3$ (c) p^3q^2 (d) $-7q^2$

2. Express ₹1.45 in paise

(a) 14.5p   (b) 0.145   (c) 145   (d) 1450

3. The sum of $-3x$ and $-7x$ _____

(a) $7x$ (b) $-10x$ (c) $10x$ (d) $3x$

4. $5x$ divided by y is equal to $9z$ in algebraic form is

(a) $5x + y = 9z$ (b) $5x \div y = 9z$ (c) $y - 5x = 9z$ (d) $5x \times y = 9z$

5. Convert into a decimal fraction: $\dfrac{7}{40}$

(a) 0.175   (b) 175   (c) 1.75   (d) 17.5

6. Express the following fraction as percentage. $\dfrac{9}{15}$

(a) 6%   (b) 0.6%   (c) 60%   (d) 600%

7. In the equation $x-5 = 20$, the value of x is

(a) 15   (b) 20   (c) 25   (d) 5

8. If two lines lie in the same plane and are not parallel to each other are called _____ lines.

(a) Intersecting   (b) Parallel   (c) Collinear   (d) Concurrent

9. The unit of measurement of an angle is

(a) litres   (b) centimeters   (c) degree   (d) grams
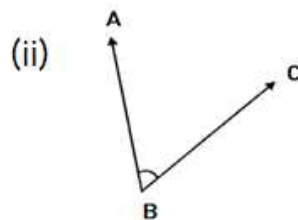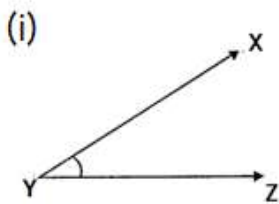
10. A line segment has _____ end points.

(a) three   (b) one   (c) two   (d) zero

Q.I).B. State whether the following statement are true or false.If false correct the underline word. **(5m)**

1. Through any two points ,only <u>one</u> line can be drawn.
2. 7x has <u>two terms</u> 7 and x.
3.9xyz and 5xy are <u>like</u> terms.
4.<u>Concurrent lines</u> always meet at the same point.
5.When two straight lines intersect , the angles on the opposite sides of their point of intersection are called <u>Adjacent angles</u>

Q.II).

1.For each angle given below, write the names of the arms and the name of the angle.   (2m)

(i)

(ii)

2. Add :   -3a-2b ; 4a+12b   (2m)

3. Subtract the sum of 21.19 and 8.7 from 40   (2m)

4. Find the complement of :   (2m)
$\frac{1}{5}$ of 120°

5. Solve : $x - 4\frac{1}{3} = 11$ (2m)

6. Express 60 paise as a percentage of Rs 3   (2m)

7. (i) Group the like terms together   (3m)
$5x^2y^2$, $-2x^3y$, $\frac{x^2y^2}{4}$, $\frac{x^3y}{5}$

(ii) Write the degree of the polynomial.
$5x^2 + x^3y^5 + 7y^5x^2 - 3x^4$

(iii) Write the numeral co-efficients of

$- 4x \div 2y$

Q.III)

1. Identify the type of the algebraic expression given below as Monomial, Binomial or Trinomial. (3m)

(i) $3x^2 + y^3$
(ii) $5a - 3 \times a \div b$
(iii) $6 \times m \div 4 + n \div 2 - m \div 3$

2. There are 1650 students in a school out of them 34 % are girls, Calculate the number of boys in this school ? (3m)
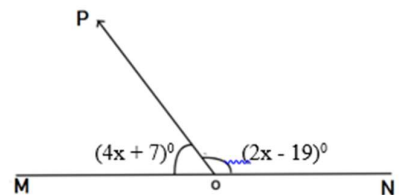
3. Solve the following linear equation (4m)
   a) $3x - 5 = x + 15$

   b). $2 (3x - 4) = x + 2$

Q.IV).

1. In the figure given , MON is a straight line. (3m)
   Find the value of x , $\angle$MOP and $\angle$NOP.

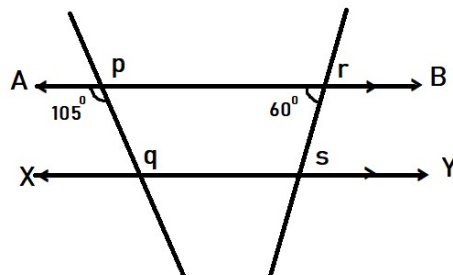2. Multiply : $(4x - 2y) (5x + 3y)$ (3m)

3. Subtract the sum of $5x^2 - 7x + 4$ and $3x^2 + 5x + 2$ from the sum of $6x^2 + 2x + 1$ and $x^2 + x + 1$ (4m)

Q.V).

1. A piece of cloth is 15.35m long .The cloth is divided into 5 equal parts. Find the length of each part? (3m)

2. Ravi's monthly income is ₹ 9300 , 31% is spend on food ,30% on house rent and rest he saves . Calculate his montly savings ? (3m)

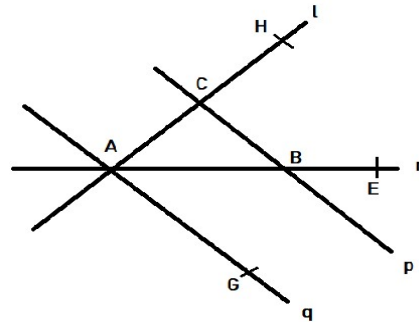3. In the figure given below, If AB ll XY find the angles p , q , r and s. (4m)

Q.VI).

1. Evaluate : 20% of 750 – 15% of 600 + 12% of 900   (3m)

.

2. Simplify : $0.0325 \times 400 – 741.6 \div 60$ (3m)

                                                            (4m)

3. From the adjoining figure, name the
   following question
   (i).One pair of parallel lines.
   (ii).One set of collinear point
   (iii)Lines whose point of intersection is C.
   (iv)Lines whose point of intersection is A.

Q.VII).

1.Divide : $36x^3y^3 + 30x^4y^5 – 15x^5y^4$ by $-3x^2y^3$ (3m)

2 The measure of two supplementary angles are $(5x - 10)^0$ and $(3x + 30)^0$. Find x.
                                                      (3m)

3. Simplify : $4(2m + 5) – 3(5 – 3m) – 7(m - 4) = 18$ (4m)

---------------------------ALL THE BEST---------------------------