

## St. Mary's School, Samastipur

### Periodic Test-II 2018-19

Class- VIII (A+B)

Time-  $2\frac{1}{2}$  Hrs.

Subject-Math

F.M-100

1. Complete the following Identities 5

- (i)  $(a+b)^2 = \dots\dots\dots$       (ii)  $(a^2-b^2) = ( \quad ) ( \quad )$   
 (iii)  $(a-b)^2 = \dots\dots\dots$       (iv)  $(a+2)(a+2) = ( \quad )$   
 (v)  $[(x-y)^2]^2 = ( \quad )^{\square}$

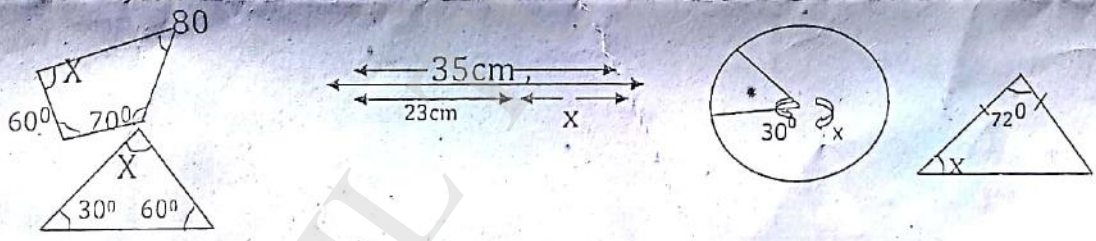
2. Find H.C.F 5

- (i)  $18a^3$  and  $27a^2b^2 = \dots\dots\dots$       (ii)  $12p^2$  and  $6p^3 = \dots\dots\dots$   
 (iii)  $xya^2$  and  $xya = \dots\dots\dots$       (iv)  $Cz$  and  $-dz = \dots\dots\dots$   
 (v)  $P^2+pq + pr = \dots\dots\dots$

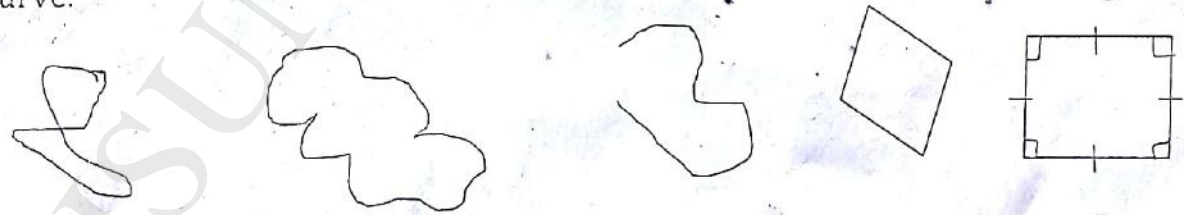
3. Complete the following polynomial Midterm product numbers. 2

| Polynomial        | Midterm           | Product           | Numbers           |
|-------------------|-------------------|-------------------|-------------------|
| (i) $X^2-15+56$   | $\dots\dots\dots$ | $\dots\dots\dots$ | $\dots\dots\dots$ |
| (ii) $X^2-14x+45$ | $\dots\dots\dots$ | $\dots\dots\dots$ | $\dots\dots\dots$ |

4. Find the angle mark by x. 5



5. Classify the figure as open curve, simple close curve polygon, regular polygon, close curve. 5



6. (i) Write the sides of triangle, pentagon. 5  
 (ii) Find the number of diagonals of quadrilateral, triangle.  
 (iii) Write the sum of angles of quadrilateral.....  
 (iv) Write the sum of angles of triangle ....  
 (v) Write the sum of two adjacent angles of quadrilateral, ..... 180

7. Write the following. 5

|                    |                 |              |
|--------------------|-----------------|--------------|
| <u>No of faces</u> | <u>vertices</u> | <u>Edges</u> |
|--------------------|-----------------|--------------|

- Cube .....  
 Cone.....  
 Cuboid.....
8. Draw the following figures cube, cuboid. 2
9. Factorise the following. 4
- (i)  $n(n-3) - 7(3-n)$       (ii)  $(x-2)^2 + 9(x-2)$
10. Divide 4
- (i)  $a^2 - 3^2$  by  $(a-3)$       (ii)  $x+5$  by  $(x+5)(x-5)$
11. Simplify (by using identity) 6
- (i)  $(3x^2 + \frac{1}{x})(3x^2 - \frac{1}{x})$       (ii)  $(ab+bc)^2 - 2ab^2c$       (iii)  $(x-3)(x-3)$
12. Solve the following. 4
- (i)  $\frac{5p}{2} = 15$       (iii)  $25+5p=90$
13. Each Q carry 3 marks. 18
- Solve the following and find the value of x.
- (i)  $8x-11-5x+3=2x+4-3x$       (ii)  $\frac{2-7x}{1-5x} = \frac{3+7x}{4+5x}$       (iii)  $\frac{2x+5}{3} + \frac{5x-4}{4} = 1$
- (iv) The sum of two angles of quadrilateral is  $160^\circ$ , The other two angles are in the ratio 2:3 find the angles.
- (v) Prove that the sum of. Four angles of a quadrilateral is  $360^\circ$ .
- (vi) Two apporite angles of a parallelogram are  $(4x-5)^\circ$  and  $(60-x)^\circ$  find the measure of each angle of the parallelogram.
14. Each Q. carries 5 marks. 30
- (i) The perimeter of a parallelogram is 36cm. The smaller side is 8cm long. Find the length of its longer side.
- (ii) The perimeter of rectangle is 240. If its length is decreased by 10% and its breadth is increased by 20% we get the same perimeter. Find the length and the breadth of the rectangle.
- (iii) A positive number is 5 times the other numbers. If 21 is added to both the numbers then one of the new number becomes twice the other new number. What are the numbers?
- (iv) Baichung's father is 26years younger than baichung's grand father and 29 older them Baichung. The sum of the ages of all the three is 135 years. What is the age of each one of them?
- (v) Conectruct a quadrilateral ABCD with following measurements  $AB=3\text{cm}$ ,  $BC=3.8\text{cm}$ ,  $CD=4.1\text{cm}$ ,  $Ad=3.4\text{cm}$  and diagonal  $BD=5\text{cm}$ ,
- (vi) Construct a square with one diagonal 5cm