

**Annual Examination, April 2011**

<b>Class</b> : 7	<b>Roll No.....</b>	<b>Subject: Mathematics</b>
<b>Medium</b> : English	<b>Marks: 100</b>	<b>Time : 2½ hours</b>

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**PART - B****Time: 30 Minutes****Marks: 20****I. Understanding Mathematical Concepts****(5x1=5)****Note: Choose the correct answer and write its letter in the bracket**

- Degree of  $4xy-3x^2y^3+7x^2y^2+x^4$  is ( )  
(a) 4 (b) 5 (c) 3 (d) 2
- In the expression  $a(x+y)+b(x+y)$ , the common factor of its terms is ( )  
(a) a (b) b (c) a+b (d) x+y
- Example for an inequation ( )  
(a)  $2x+5$  (b)  $x+7=9$  (c)  $x+y<5$  (d) 8
- $l, b, h$  are the measurements of a cuboid. Its lateral surface is ( )  
(a)  $lbh$  (b)  $2(lb+bh+lh)$  (c)  $2h(l+b)$  (d)  $h(l+b)$
- which of the following is not a parallelogram ( )  
(a) Trapezium (b) Rectangle (c) Rhombus (d) Square

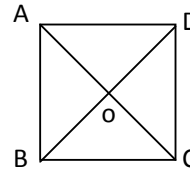
**II. Problem solving****(5x1=5)****Note: Fill in the blanks**

- Writing 128 in power notation .....
- Number of boys and girls in a class is 60. Out of this 35 are boys. When a pie diagram is drawn for this data, the angle of sector that denotes number of girls is .....
- Ratio of angles in a triangle is 1:2:7. Value of largest angle in the triangle is .....
- $\sqrt{4} \times \sqrt{25} = \dots\dots\dots$
- Lateral surface area of a cube is  $4S^2$ . If side of the cube is 5cm then its lateral surface area is .....

**III. Logical thinking****(5x1=5)****Note: Fill in the blanks**

- $(x^0)^{1000} = \dots\dots\dots$
- If  $4x^2+4x+A$  is a perfect square then  $A = \dots\dots\dots$
- Expressing 0.412 in the form of a Rational number .....
- In the square ABCD, what kind of triangle is  $\triangle AOD$  .....

15. If  $a^2 - b^2 = 1$ ,  $a + b = -1$  then  $a - b = \dots\dots\dots$



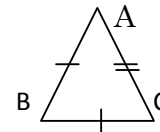
**IV. Expressing in Mathematical Language**

**(5x1=5)**

**Note:** Write the correct letter in bracket

16. Observe the triangle, write which of the following is correct ( )

- (a) Sides AB, BC are equal
- (b) Sides AC, BC are equal
- (c) Sides AB, AC are equal
- (d) There sides are not equal



17. Which of the following denotes centroid ( )

- (a)
- (b)
- (c)
- (d)

18. Which of the following denotes difference between  $x$  and  $y$  is 7 or less than 7 ( )

- (a)  $x - y = 7$
- (b)  $x - y < 7$
- (c)  $x - y \geq 7$
- (d)  $x - y \leq 7$

19.  $x^y$  means ( )

- (a)  $x$  is multiplied  $y$  times
- (b)  $y$  is multiplied  $x$  times
- (c)  $x$  is added  $y$  times
- (d)  $y$  is added  $x$  times

20. Angle of a sector in a circle is  $60^\circ$ . Ratio of area of circle and area of sector is ( )

- (a) 1:2
- (b) 2:1
- (c) 6:1
- (d) 1:6