Set - II

Annual Examination, April 2011

Class	**: 8**	**Roll No. .....**	**Subject: Mathematics**
Medium	**: English**	**Marks: 100**	**Time : 2½ hours**

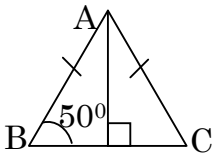
PART – B

Time: 30 minutes **Marks: 20**

I. Understanding Mathematical Concepts

Note: Choose the correct answer for the given problems **(5x1=5)**

1. Find the least natural number by which 27 shall be multiplied to make it a perfect square ( )
   (a) 1 (b) 2 (c) 3 (d) 4
2. If a❤e=e❤a=a then e follows ..... property in the set of numbers P ( )
   (a) Closure (b) Associative (c) Inverse (d) Identity
3. Compound ratio of p:q, r:s is ( )
   (a) ps:qr (b) pr:qs (c) pq:rs (d) qr:ps
4. Which of the following is not a set ( )
   (a) Students in your class
   (b) Natural numbers less than 10
   (c) 10 good books in school library
   (d) English letters in the word "School"
5. Value of ∠CAD in the adjoining figure ( )
   (a) 50^0
   (b) 40^0
   (c) 90^0
   (d) 80^0



II. Problem solving

Note: Fill in the blanks with suitable answer **(5x1=5)**

6. $(2^3)^2 \times 2^{3^2}$ =.....
7. $(3x^2-5x+4)\times 2x$ = ...
8. Factors of a^2+4a+4 are .....
9. LCM and GCD of two numbers are 60, 10 respectively. If one number is 20 then the second is .....
10. $9-7x = 5-3x$ then x= .....

III. Reasoning (5x1=5)

Note: Fill in the blanks with suitable answer

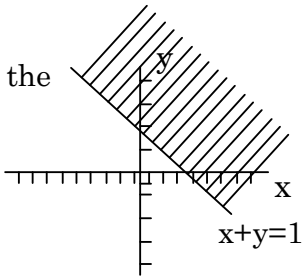
11. Number of possible lines of symmetry for the adjacent figure is .....

12. Ravi sold two articles at the same price. If he gets profit x% on the first and loss x% on the second. On the whole Ravi got .....
13. $x^2=a^2x$ then $\sqrt{x}$=.....
14. Area of a trapezium is ½ (a^2-b^2), a,b are the lengths of the parallel sides, then the distance between the sides of trapezium is .....
15. Region represented by the in equation $x>0$ lies in ..... quadrants

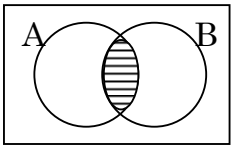
IV. Expressing in Mathematical language

Note: Choose the correct answer for the following problems **(5x1=5)**

16. To draw a circle passing through three given points ( )
    a) Not possible b) Possible if they are not collinear
    c) Possible even if they are collinear
    d) Can draw many circles
17. What does the shaded region represents in the adjoining figure ( )



    a) $x+y>1$ b) $x+y<1$
    c) $x+y \geq 1$ d) $x+y \leq 1$
18. In the adjacent figure A is the set of isosceles triangles, B is the set of right triangles then region shows ( )



    a) Only isosceles triangles
    b) Only right angled triangles
    c) Only isosceles right angled triangles
    d) Equilateral triangle
19. LCM of two relative prime numbers is largest in the given two numbers ( )
    a) Largest in the given two numbers
    b) Product of two given numbers
    c) Smallest in the given two numbers
    d) Sum of the two given numbers
20. Rule applicable to the number sets N, W, Z is ( )
    a) $N \subset W \subset Z$ b) $W \subset N \subset Z$ c) $N \subset W \subset Z$ d) $Z \subset N \subset W$