FUSCO'S SCHOOL (I.C.S.E)
Indiranagar, Bangalore
ANNUAL EXAMINATION 2016-17
Subject: Mathematics

Time: $2\frac{1}{2}$hrs.

Class: VIII   **Marks:80**

Section – A

Question 1
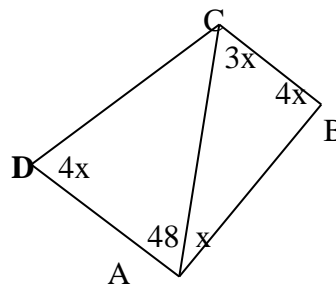   a. Calculate the amount and the compound interest on Rs. 3500 at 10%   3
       per annum in 2 years
   b. Construct a quadrilateral ABCD , when AB = 3.2cm, BC = 5.2cm,   3
       CD = 6.2cm, DA = 4.2cm and BD = 5.2cm.
   c. Solve the following equations :   4
           i.   3 (x + 1) = 12 + 4 (x- 1)
           ii.   (x- 5) (x + 3) = (x − 7) (x +4)

Question 2
   a. Two angles of a quadrilateral are 68° *and* 76°.If the other two
       angles are in the ratio 5:7, find the measure of each of them.   3
   b. Consturct a right-angled triangle XYZ,if : ∠Z = 90° ,YZ=5cm and XY=7.2cm.   3
   c. A borrowed 2,500 from B at 12% per annum compound interest.   4
       After 2 years, A gave Rs.2,936 and a watch to B to clear the account.
       Find the cost of the watch.

Question 3
   a. A's salary is same as 4 times B's salary.If together they earn Rs.3750 a   3
       month , find the salary of each.
   b. Construct a rectangle ABCD when its sides are 6cm and 7.2cm.   3
   c. From the following figure find,   4
         i.   x
         ii.   < ABC
         iii. < ACD

Question 4
   a. Calculate the difference between the simple interest and the   3
       compound interest on Rs. 4,000 in 2 years at 8% per annum compounded yearly.
   b. The length of a rectangle is twice its width.If its perimeter is 54cm.   3
       Find its length.

   c. In parallelogram PQRS, < Q = (4x-5)° and < S = (3x + 10)° .   4
       Calculate: < Q and < R.

Section – B

Question 5

  a. Find the compound interest correct to the nearest rupee, on Rs. 2400 for   3
$2\frac{1}{2}$ years at 5% per annum.

  b. Draw a triangle with sides 4.5cm , 5cm, and 6cm. Draw the incircle   3
of this triangle.

  c. A man lends Rs.12,500 at 12% for the first year,at15% for the second   4
year and at 18% for the third year.If the rates of interest are compounded
yearly; find the difference between the C.I.of the first year and the compound
interest for the third year.

Question 6

  a. Solve the equation;   3
$$\frac{a+5}{6} - \frac{a+1}{9} = \frac{a+3}{4}$$

  b. Construct a parallelogram ABCD, when AB = 4.4cm, AD = 6.2cm and   3
AC = 4.8cm.

  c. A man's age is three times that of his son and in twelve years he   4
will be twice as old as his son would be.What are their present ages?

Question 7

  a. Solve the following equation   3
$$\frac{x-8}{5} = \frac{x-12}{9}$$

  b. The sum of three consecutive odd numbers is 57.Find the numbers.   3

  c. Calculate the amount and compound interest on Rs. 4600 in 2 years   4
when the rates of interest for successive years are 10% and 12%
respectively.

Question 8

  a. Three angles of a quadrilateral are equal. If the fourth angle is 69° .   3
Find the measure of equal angles.

  b. Construct a regular hexagon of side 3.2cm.   3

  c. ABCD is a rhombus. If < BAC = 38°, find :
      i.   < ACB   4
      ii.   < DAC
      iii.   < ADC