II SUMMATIVE ASSESSMENT(2017-18)

SUB: MATHS

STD: MATHS   MAX MARKS : 50

DATE: 6/4/18   TIME: 2 Hrs

I (A)   Fill in the blanks: (5)

(i)   The measure of semicircular arc is _____
(ii) The area of a square of side 12cm is _____
(iii) The number of times a particular score occurs in a data is called the _____ of that score.
(iv) An angle whose vertex is centre of the circle is called _____
(v)   A cuboid has _____ faces

II(B)   Choose the correct option :   (5)

1. The total surface area of a cube of length 'a' open at one end is _____

a) a^2 b) $4a^2$ c) $5a^2$ d) $6a^2$

2. If the interest on ₹ 1700 is ₹ 340 for 2 years, the rate of interest must be _____

a) 10%   b) 12%   c) 15%   d) 4%

3. If the measure of major arc is 200^0, then the measure of the corresponding minor arc is _____

a) 20^0 b) 160^0 c) 60^0 d) 260^0

4. The Pythagorean triplet from the following are _____

a) 2,4,5   b) 4,5,6   c) 2,6,7   d) 3,4,5

5. (x+y) (x-y) = _____

a) $(x+y)^2$ b) $(x-y)^2$ c) x^2+y^2 d) $x^2 - y^2$

III(C) Do as directed :   (5)

1. Find whether the sides of a triangle 8,15,17 is a right angled triangle or not?

2. In a right angled triangle   ABC , the sides of a triangle are 6cm and 8cm respectively. Find its area.

3. Factorise the monomial 15𝑥 and write it in the product form.

1

4. In the figure m∠SOT =65^0, find m(arc SUT)
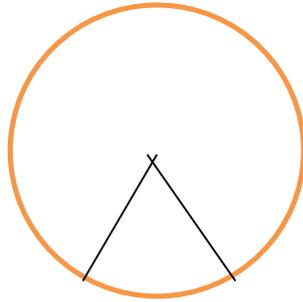
5. Suvidya borrowed a sum of ₹ 30,000 at 8 p.c.p.a interest for a year from her bank to buy a computer. At the end of the year she had to pay back an amout of ₹ 2,400 over and above what she had borrowed. What is the total amout returned to the bank?

II. Solve any **FOUR**: (8)

1. Factorise $2x^2 + 8xy$
2. Expand $(10+y)^2$
3. The perimeter of a rectangle is 90cm. If its breadth is 20cm. Find its length.
4. The daily rainfall for each day of a week in acertain city is given in millimetres. Find the average rainfall during the week.
   9,11,8,20,10,14,12
5. In the given figure, find the value of x

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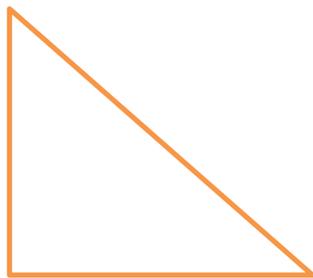
III Solve any **THREE**: 9

1. Use the expansion formula to find the value of $(997)^2$

2. A matchbox is 4cm long, 2.5cm broad and 1.5cm in height. Its outer sides are to be covered exactly with craft paper. How much paper will be required to do so?

3. Use the formula to find the value of 502 x 498

4. What is the value of a rectangular plot of 75m long and 30.5m broad at the rate of ₹ 1000 per square metre?

IV. Solve any **TWO**: (8)

1. The top of a ladder of length 15m reaches a window 9m above the ground. What is the distance between the base of the wall and that of the ladder?

2. One side of a cubic box is 0.4m. How much will it cost to paint the outer surface of the box at the rate of ₹ 50 per square metre?

3. The number of chapatis that 30 children in a hostel need at every meal is given below. Draw a frequency table for these scores.

   3, 2, 2, 3, 4, 5, 4, 3, 4, 5, 2, 3, 4, 3, 2, 5, 4, 4, 4, 3, 3, 2, 2, 2, 3, 4, 3, 2, 3, 2

V. Solve any **TWO** : (10)

1. The area of a rectangular garden of length 40m is 1000sqm.Find the breadth of the garden and its perimeter. The garden is to be enclosed by 3 rounds of fencing, leaving an entrance of 4m.Find the cost of fencing the garden at a rate of ₹ 250 per metre.

2. A rectangular garden is 40m long and 30m wide. A two-metre wide path is to be paved inside the garden along its boundary using tiles 25cm X 20cm in size. How many such tiles will be required?

3. A dice was cast 40 times and each score noted is given below. Draw a frequency table for this data
   3, 2, 5, 6, 4, 2, 3, 1, 6, 6, 2, 3, 5, 3, 5, 3, 4, 2, 4, 5, 4, 2, 6, 3, 3, 2, 4, 3, 3, 4, 1, 4, 3, 3, 2, 2, 5, 3, 3, 4

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