

I SUMMATIVE ASSESSMENT 2017-2018

Date:06/10/17
Time: 2 hrs

SUBJECT: MATHS

Std: VIII
Marks: 50

I A] **Fill in the blanks:** - (5)

1. The formula to find the area of a rhombus is- x _____.
2. Approximate value of $\pi =$ _____.
3. The constant 'k' is called the constant of _____.
4. If $2x = 8$, $x =$ _____.
5. $(a+6)^2 =$ _____ + _____ + _____.

B] **Choose the correct alternative from the given alternatives:** - (5)

1. $(15x+ 2y)^2 = 225x^2 +$ _____ $+ 4y^2$.
($30xy$, $60xy$, $16xy$, $20xy$)
2. If $5q-3$ is 27 therefore the value of q is _____.
(6, 10, 30, 5)
3. $(x+7)(x- 5) = x^2 + 2x +$ _____.
($+35$, $- 35$, $-2x^2$, $2x^2$)
4. If $--- - 7 = 5$, therefore the value of x is _____
(24, 12, 6, 36)
5. The circumference of a circle having diameter 28cm is _____ cm.
(2464, 88, 616, 72)

C] **Do as directed:** - (5)

1. Give the formula to find the circumference of a circle.
2. Use the formula to expand $(m - 5)^2$.
3. Solve : $--- = 4$
4. State the formula to find the area of an equilateral triangle.

5. Solve : $6 + x = 18$

II Solve the following: - (Any 4) (8)

1. Find the value using the formula : 98^3
2. In a parallelogram ABCD, the base $AB = 7\text{cm}$ and height $DE = 6\text{cm}$. What is its area?
3. The diagonals of a rhombus are 84cm and 42cm long. What is the area of the rhombus?
4. Use the formula to multiply $(m - -)(m + -)$
5. $\text{---} = 2$

III Solve the following: - (Any 3) (9)

1. The area of a certain rhombus is 990sq.cm . If the length of one diagonal is 36cm , what is the length of the other?
2. The radius of a circular garden is 56m . It is to be fenced with four rounds of wire. If the wire costs Rs 20 per meter, what is the cost of fencing?
3. $\text{---} = \text{---}$
4. Use the formula to expand $(4x + y - 7)^2$

IV Solve the following: - (Any 2) (8)

1. The ABCD alongside is the map of a plot. Using the given measures find the area.

2. Find the area of the shaded part:-

3. Expand :

i. $(5a + 3c)^3$

ii. $(2x + 7)(2x + 3)$

V Solve the following: - (Any 2)

(10)

1. Using the measures given in the figure below, find the area of EFGH.

2. Shirin is 3 years younger than Maria. After 2 years the ratio of their ages will be 5:6.
How old is Shirin today?

3. Use the formula to expand

$$(2l + m - 4n)^2 - (5l + 4m - 3n)^2$$

$$= 2l(\underline{\hspace{2cm}}) + \underline{\hspace{1cm}} (5l + 4m - 3n) - 4n(5l + 4m - 3n)$$

$$= \underline{\hspace{1cm}} + 8ml - \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + 4m^2 - \underline{\hspace{1cm}} - \underline{\hspace{1cm}} - 16mn + 12n^2$$

$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + 12n^2 + \underline{\hspace{1cm}} - 26nl - 19mn$$
