# ANANDALAYA <br> PERIODIC TEST - 3 <br> Class: VII 

Subject: Mathematics
M.M: 30

Date : 04/01/2023
General Instructions:
i) All questions are compulsory.
ii) This question paper contains 16 questions.
iii) Questions 1-6 in Section A are multiple choice type questions carrying 1 mark each.
iv) Questions 7 - 13 in Section B are short-answer type questions carrying 2 marks each.
v) Questions $14-15$ in Section C are short -answer type questions carrying 3 marks each.
vi) Question 16 in Section D is long-answer type question carrying 4 marks.

## SECTION-A

1. Find the circumference of a circle of diameter 5 cm .
2. How many square cm makes $1 m^{2}$ ?
3. Area of triangle PQR is $100 \mathrm{~cm}^{2}$. If the altitude QT is 10 cm , find the base PR .

4. Which of the numbers ( 8 or -8 ) will satisfy the following equation?
$2 x=16$
5. Find the sum of $3 x, 4 x,-5 x$ and $7 x$
6. If Rohit has $5 x y$ toffees and Shantanu has $20 x y$ toffees, how many more toffees Shantanu has than Rohit?

## SECTION-B

7. Find the area of parallelogram ABCD , if the area of the shaded triangle is $9 \mathrm{~cm}^{2}$.

8. Solve:
a) $-5 t=-25$
b) $\frac{2}{3} x=12$
9. Sandeep has twice as much money as Sonia. Together they have ₹ 150 . Form an equation and find how much money does Sonia have?
10. A number is multiplied by 3 and then 5 is added to it to get 20 . What is the number? Form an equation and then solve.
11. Solve :
a) $3(x+5)=9$
b) $\frac{w}{5}+5=20$
12. Write the terms and the numerical coefficient of the terms in the expression :
a) $7 a x^{3}-8 z+5$
b) $-x y z-3 x^{2} y$
13. Subtract $4 x y-5 y z-3 x z$ from $18 x y+4 y z$

## SECTION-C

14. A garden is in the shape of a rectangle of length 100 m and breadth 60 m . A path of 3 m is paved all round inside the garden. Find the area left for flower bed. Also find the area of the path.

15. Subtract the sum of $2 x^{3}-3 x^{2} y+2 x y^{2}+3 y^{3}$ and $x^{3}-2 x^{2} y+3 x y^{2}+4 y^{3}$ from $x^{3}-$ $3 x^{2} y+y^{3}$

## SECTION-D

16. a) Find the area of the shaded part.


14 cm
b) The diameter of a circular field is 98 m . If Susan walks at a rate of 14 m per minute, how long will it take her to walk round the field once?

