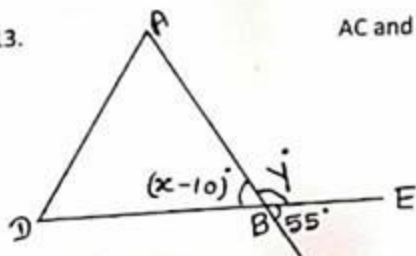| கணிதம் 1, 11 Mathematics 1, 11	32	T	I, 11	இரண்டு மணித்தியாலங்கள் Two Hours

அட்டவணை Index No		Mathematics

Part I

1. Price of 1kg sugar is R.s 100 calculate the price of 150g sugar?
2. Write the supple mentary angle of $(180-X)$.
3. Find the Value of $(-1) – (-5)$ by using number line.
4. Calculate the value $(-2.3) + (+8.12)$
5. Simplify $-2(X-3)- (x+2)$
6. Find the value of $2(X-5y)- 3(7-X)$ when $X=2$ and $Y=-1$
7. How many edges are in a dodecahedron?
8. Fill in the cages $30X+24Y+18=$ $(5X+\square+\square)$
9. Find the value of $\sqrt{676}$
10. Express 2005kg in metric tons?
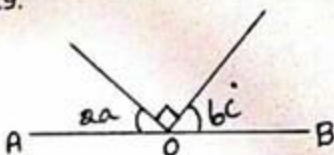11. Evaluate. $(-1)^{3}\times 2^{2}\times(-5)$

12. Fill in the cages. $\dfrac{(+6)\times \square}{(-2)} = (+15)$

13.

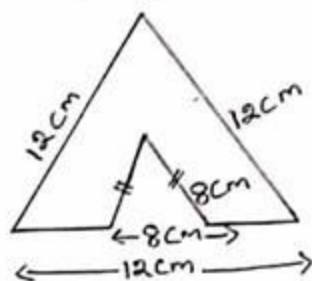AC and DE are straight lines. Find the Value of x and y?

14. Which triangular number is 91?
15. Find the Value of $(-1)^{201}$
16. Calculate the Value of $\sqrt{9}+ \sqrt{25}$
17. Simplify $-2X (a+4) – 3X (a-2)$
18. Express 1.0102 metric tons in kg?

19.

AOB is a straight line.
Find the value of $(a+3c)$

20. Calculate the perimeter of the given figure.

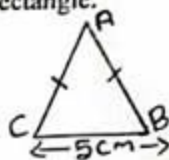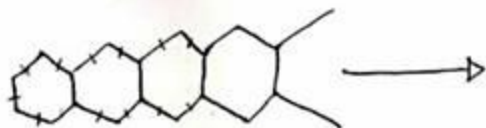
(20x2=40 marks)

Part-II

1)

I) The perimeter of a rectangle is 14X+6 and its length is 4X+2 Calculate the breadth of the rectangle.

II)

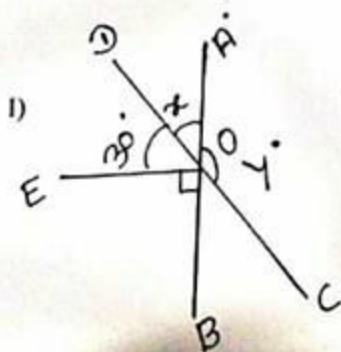The perimeter of the triangle ABC is 18cm. Calculate the length AB?

III)

The Figure shows a plan of a Foot path made by using 17 congruent hexonal cement blocks. If the length of the side of a hexagon 24cm. Find the perimeter of the path in metres.

IV) The length of a rectangle is twice and 3cm more than its breadth. If perimeter of the rectangle is 30cm. Find its breadth and length?
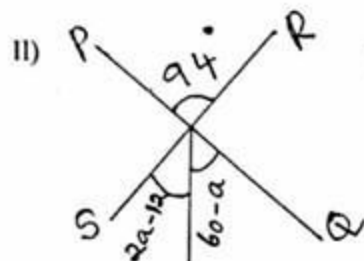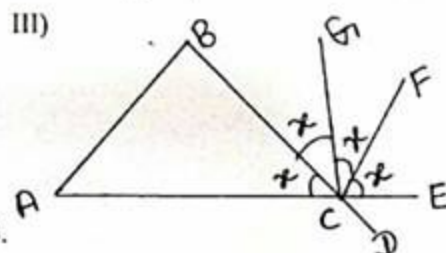
(3+3+3+3) Marks

2.

I)

AOB and COD one straight lines. Find the Value of X and Y?

II)

PÔQ and SOR are straight lines. Calculate the value of a?

III)

In the Figure.
1) Write two pair of complementary angles?
2) Write three pair of supplementary angles?
3) Find the Value of X?

(2+2+2+3+3) Marks

3.

I) Find the H.C.F of 3X, 12XY and 15Y.

II) Factorize   1) $12X - 4XY - 20X^2$

             2) $24X^2 + 3XY$

III) Simplify $(2X)^3 \times (3P)^3$

IV) Find the Value of $2X^3 - 3X$ when $X = -2$

V) Find the Value of $(\frac{-2}{3})^3$

(2+4+2+2+2) Marks

4. The general term of d a number pattern is 22-4n

I) Find the 20th term of the number pattern?

II) Which term is (-26)

III) Find the $(n-1)^{th}$ term?

IV) Which odd number is 1001?

V) Which multiple of 12 is 204?

VI) Find the sum of the integers from 1 to 25?
     Which triangular number is it?

(2+2+2+2+2++2) Marks

5.

I) Add
     5t 400kg + 3050kg

II) Subtract
     152t 51kg -5t 300kg

III) 5t 600kg of Paddy are divided in to 200 packets.
     Write the mass of paddy in a packet?

IV) Mass of rice in a store is 5t 800kg.
     Find the mass of rice in such three stores?

(3+3+3+3)Marks

6.

Compound solid is given here.

    I) How many vertices are in the compound solid?
    II) Write the number of edges are in the compound solid?
    III) How many Faces are in the given solid?
    IV) Does compound solid satisfy the Euler's relationship? Give the reason?
    V) A solid which has only straight edges. There are nine faces and nine vertices. Find the number of edges are in that solid?
    VI) Write the number of edges are in a Icosahedren?

(2+2+2+2+2+2)Marks