



யா/ஹாட்லிக் கல்லூரி, பருத்தித்துறை
J/ Hartley College, Point Pedro

முதலாந் தவணைப் பரீட்சை - 2018 - தரம் 08
First Term Examination - 2018 - Grade 08

கணிதம் I, II
Mathematics I, II

32

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I, II

இரண்டு மணித்தியாலங்கள்
Two Hours

அ.க.எ.எ
Index No

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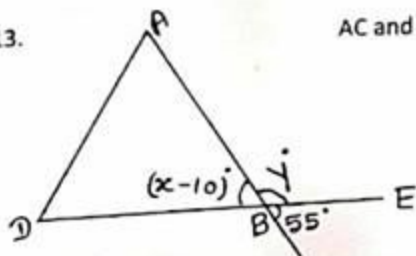
Mathematics

Part I

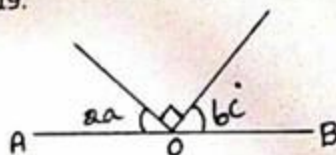
1. Price of 1kg sugar is R.s 100 calculate the price of 150g sugar?
2. Write the supplementary angle of $(180-X)$.
3. Find the Value of $(-1) - (-5)$ by using number line.
4. Calculate the value $(-2.3) + (+8.12)$
5. Simplify $-2(X-3) - (x+2)$
6. Find the value of $2(X-5y) - 3(7-X)$ when $X=2$ and $Y=-1$
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. $\frac{(+6) \times \square}{(-2)} = (+15)$

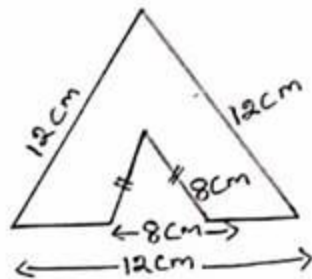
13. AC and DE are straight lines. Find the Value of x and y?



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.

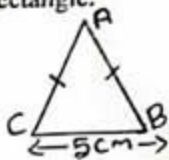


(20x2=40 marks)

Part-II

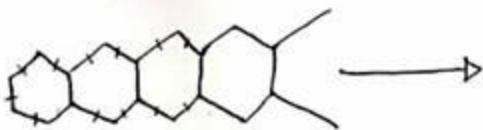
1) i) The perimeter of a rectangle is $14X+6$ and its length is $4X+2$. Calculate the breadth of the rectangle.

ii)



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

iii)

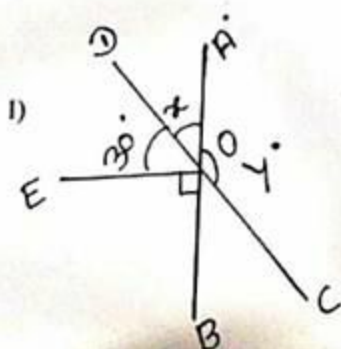


The Figure shows a plan of a Foot path made by using 17 congruent hexonal cement blocks. If the length of the side of a hexagon 24 cm. Find the perimeter of the path in metres.

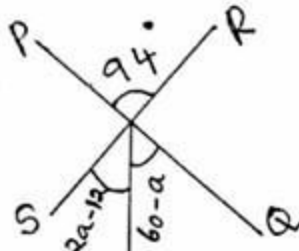
iv) The length of a rectangle is twice and 3 cm more than its breadth. If perimeter of the rectangle is 30 cm. Find its breadth and length?

(3+3+3+3) Marks

2.



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

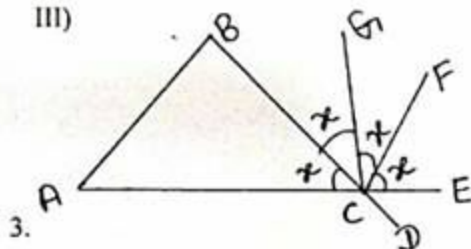
- II)  $\hat{P}OQ$ and Sor are straight lines. Calculate the value of a ?

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



- 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 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

$$5t \ 400\text{kg} + 3050\text{kg}$$

II) Subtract

$$152t \ 51\text{kg} - 5t \ 300\text{kg}$$

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

