



**WP/PL - St. Johns College - Nugegoda**  
**First Term Test - 2020**

**MATHEMATICS PART - I**

Grade 08

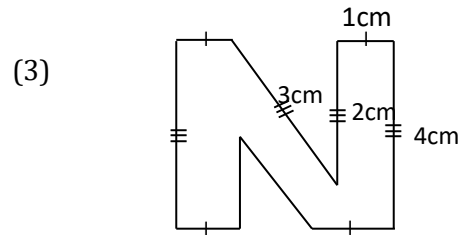
Time -

Answer all the questions

- (1) Write the next two terms of the following number pattern.

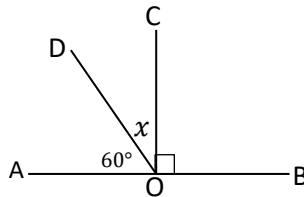
25, 22, 19, ....., .....

- (2) 1, 4, 9, 16, ..... Find the general term of this number pattern.



Find the perimeter of this figure.

- (4) Find the value of  $x^\circ$



- (5) Find i) Complement of  $70^\circ$   
ii) Supplement of  $70^\circ$

- (6) Find the value  $\sqrt{(3 \times 4) \times (3 \times 4)}$

- (7) Find the additive of  $(-12)$  and  $(+3)$

- (8) Express 7 t 450 kg in kilograms

- (9) Find the value a)  $(-7) + (-3)$   
b)  $(-3) - (-3)$

- (10) Solve  $x + 2 = 10$

(11) The area of a squared land is  $16\text{km}^2$  . Find its side length and perimeter.

(12) Fill in the blanks by inserting "<" or ">"

$$4^3 \dots\dots 50$$

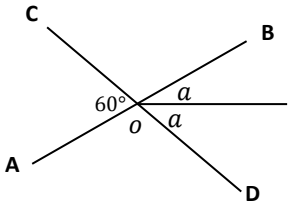
(13) Write and draw the shape of a face of a regular tetrahedron

(14) Find the H.C.F of 6, 12, 18

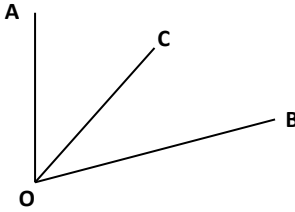
(15) Factorise this expression  $8x + 4y + 12$

(16) Find the value  $\sqrt{144}$

(17) If  $x = 2$  and  $y = -3$  find the value of  $x^2 + y^2$

(18)  Find  $a^\circ$

(19) Name two platonic solids .....

(20)  Write a pair of adjacent angles.

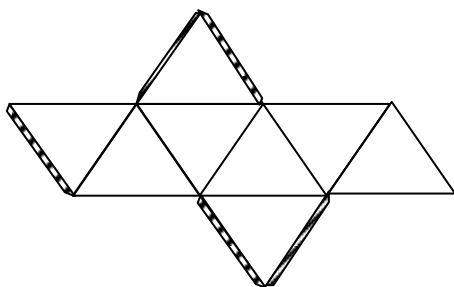
PAPER - II

Answer first question and only other 4 questions.

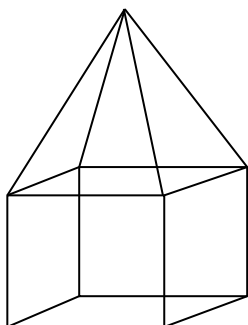
Total five questions.

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- (1) Think of the activity done in your class room when you learning the lesson of solid objects.

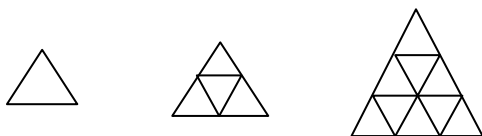


- i) Name the solid that can be constructed using the net given above (m.2)
- ii) Write the shape of its face . ( m.2)
- iii) Using above solid find
  - a) number of edges.
  - b) number of faces
  - c) number of vertexes(m. 6)
- iv) Write down the rulers relationship for solids. (m. 2)
- v) verify rulers relationship using the information of above question. (m.1)



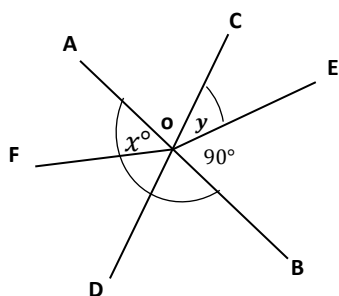
- iv) This is a solid constructed by joining a cube and a square pyramid. Find,
  - a) number of edges
  - b) number of faces
  - c) number of vertexes(m.2)

- (2) i) Draw next pattern of this creations. (m.2)



- ii) Write down the number of triangles in each figure of the above pattern in order. (m.2)
- i) Find the general term of the number pattern. (m.3)
- ii) Find the total triangles of 30<sup>th</sup> pattern by using general term. (m.2)
- iii) Show that the figure with 50 triangles is not in this pattern. (m.2)

- (3) AB and CD straight lines intersect the point O



- a) Find i)  $x^\circ$  (m.2)
- ii)  $\angle AOC$  (m.2)
- iii)  $y$  (m.2)
- iv) Magnitude of  $\angle BOC$  (m.1)

- b) Name a pair of complementary adjacent angles. (m.2)
- c) Name a pair of supplementary adjacent angles. (m.2)

- (4) i) Find factors.

a)  $5x + 20$

b)  $3xy + 9xz$  (m.2)

- ii) Simplify a)  $\frac{p^7 \times p^3}{p^4}$  b)  $(x^2 y^3)^3$  (m.4)

- iii) Find H.C.F

a) i)  $2ab, 9bc$

ii) 12, 15, 18

iii) 2, 3, 5 (m.3)

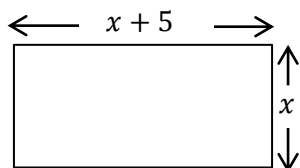
(5) Find the answers.

i)      a)       $(+9) + (-2)$                       b)       $(+1) - (-3)$   
             c)       $(-2) + (-3)$                       d)       $(-2) - (-2)$                       (m.4)

ii)      Simplify       $\frac{(+3) \times (-4)}{(-6)}$                       (m.3)

iii)      Find the value of  $\sqrt{100}$  using prime factors.                      (m.4)

(6)



Rectangular land with length is  $x + 5$  and breadth is  $x$

i) Find algebraic expression of perimeter. (m.4)

ii) Find Algebraic expression of area. (m.3)

iii) If perimeter of this land is 50m. Then find  $x$  and length. (m.4)

(7) i) Simplify.

a)	t      kg	b)	t      kg	c)	5t   250 kg $\times 7$
	10   000		6   250	d)	14 t 800 kg $\div 4$
	+ 3   450		- 4   400		
	<hr/>		<hr/>		
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ii) Fill in the blanks using suitable weighting measuring units

a) Mass of paracetamol tablet is 500 .....  
 b) Mass of cement bag is 50 ..... (m.2)

iii) If  $a = 2$ ,  $b = 3$ ,  $c = 1$  find the value of

i)       $a^2$                       (m.1)

ii)       $a^2 b$                       (m.2)

iii)       $a^2 b + c$                       (m.2)

