

First Term Test - 2020

MATHEMATICS PART - I

Grade 08

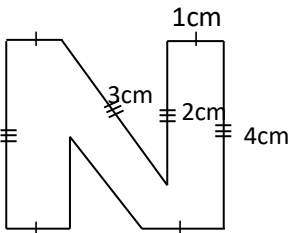
Time -

Answer all the questions

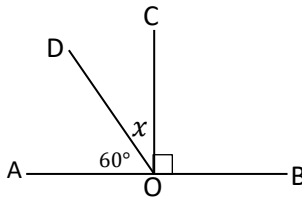
- (1) Write the next two terms of the following number pattern.

25, 22, 19,,

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

- (3)  Find the perimeter of this figure.

- (4) Find the value of x°



- (5) Find i) Complement of 70°
ii) Supplement of 70°

- (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 $16km^2$. Find its side length and perimeter.

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

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

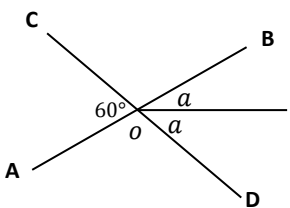
(13) Write and draw the shape of a face of a regular tetrahedron

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

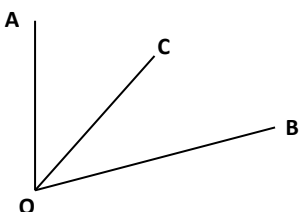
(15) Factorise this expression $8x + 4y + 12$

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

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

(18)  Find a°

(19) Name two platonic solids

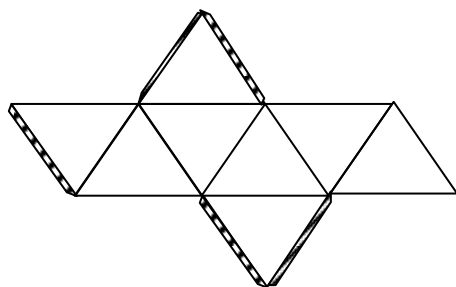
(20)  Write a pair of adjacent angles.

PAPER - II

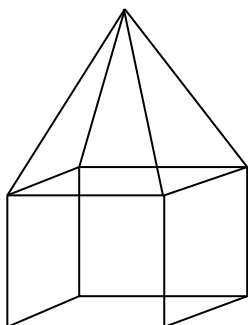
Answer first question and only other 4 questions.

Total five questions.

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

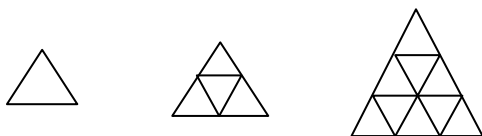


- i) Name the solid that can be constructed using the net given above (m.2)
- ii) Write the shape of its face . (m.2)
- iii) Using above solid find
 - a) number of edges.
 - b) number of faces
 - c) number of vertexes(m. 6)
- iv) Write down the rulers relationship for solids. (m. 2)
- v) verify rulers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



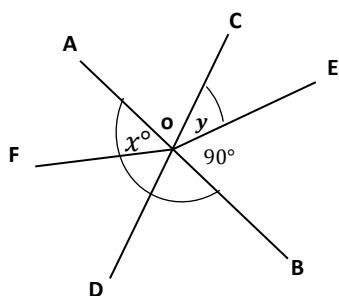
- iv) This is a solid constructed by joining a cube and a square pyramid. Find,
 - a) number of edges
 - b) number of faces
 - c) number of vertexes(m.2)

- (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 30th 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° (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)

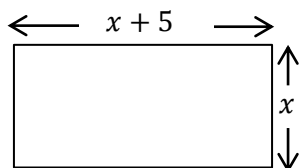
(5) Find the answers.

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)

