Minuwangoda Education Zone

Second Term Evaluation - 2023

Grade - 07

Mathematics I/II

Name: …… Time: 2 hours

Part I

- **Answer all questions.**
- **Each question carries 2 marks.**

1) Find the value $(+5) + (-7)$

2) Express $\frac{11}{3}$ as a mixed number

3) Simplify $10 + 3 \times 5$

4) $10m\ 35cm$ long wire is removed from 30m long wire. Find the length of the remaining portion

5) A= {even numbers from 1 to 10}
Represent the above set in a Venn diagram

6) Write
   i. the decade
   ii. the century which A.D.2020 belongs

7) Underline the numbers which are divisible by 9
2173, 4536, 352, 1029, 189

8) Find the value of $2x^2$ when $x = 3$

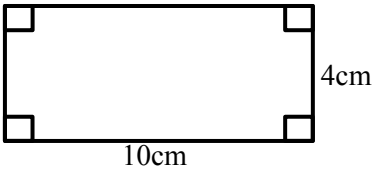
9) Express in index form. $m \times 3 \times m \times 3 \times 3$

10) $12 = 2 \times 2 \times 3$
$18 = 2 \times 3 \times 3$
12 and 18 have been written as a product of prime factors. By using that find the highest common factors (HCF) of 12 and 18

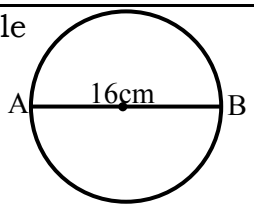
11) Price of a book is Rs.x and the price of a pen is Rs.25. Construct an algebraic expression for the total cost of 2 books and 2 pens.

12) $\frac{3}{25} = \frac{\square}{100}$
i. Fill in the blank
ii. Express it as a decimal number

13) Find the area of the following figure



14) In the given figure AB is the diameter. Find the radius of that circle

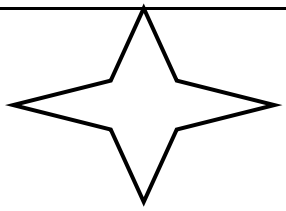


15) Subtract $8l\ 80ml - 3l\ 300ml$

16) Express the mass $4525mg$
i. in grams
ii. in grams and milligrams

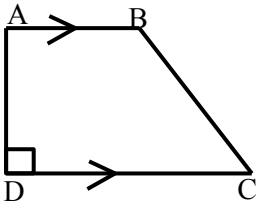
17) Solve $2x + 3 = 9$

18) Draw all the axes of symmetry of the following figure



19) Simplify $5\frac{2}{5} - 2\frac{1}{3}$

20) In quadrilateral ABCD
i. Write a parallel line to AB
ii. Name the perpendicular distance between that 2 lines

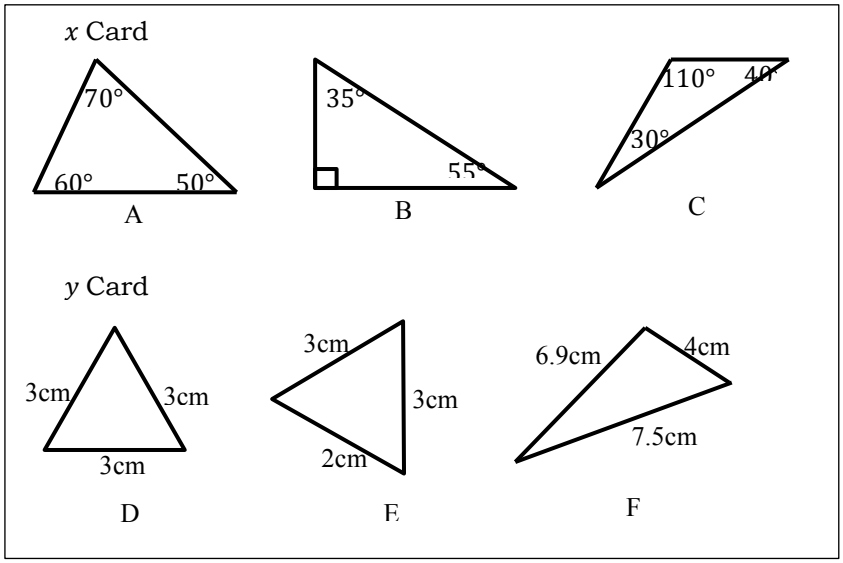


Part II

- **Answer first question and 4 other questions**
- **First question carries 16 marks and remaining questions carry 11 marks each.**

01)

(a)



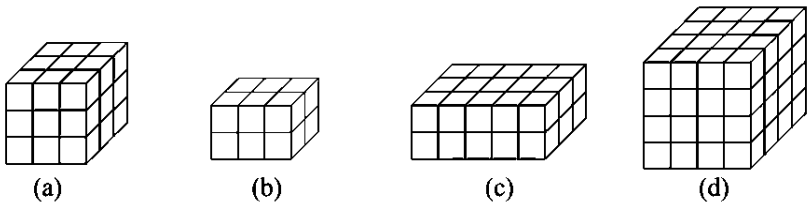
Mathematics teacher of Vidyasara Maha Vidyalaya has presented above 2 cards to grade 7 students

i. In which card the classification is done according to the angles.

ii. In which card the classification is done according to the side lengths

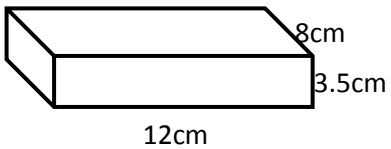
iii. Classify and write the type of A, B, C, D, E and F triangles appropriately

(b)



Find the volume of above solids in cubic centimeters (Take the volume of 1 small cube as $1cm^3$)

(c) Fill in the blanks.



Length of the cuboid =

Breadth of the cuboid =

Height of the cuboid =

Volume of the cuboid = ... × ..... × .....

= ..... × ..... × .....

= .....

02)

i. Breadth of the given rectangle is $x\ cm$. If the length of that rectangle is 10cm more than it's breadth, construct a formula for perimeter (P) in terms of x

ii. Solve
   a) $x - 7 = 10$
   b) $3y - 2 = 13$

iii. Multiply the given volumes form given numbers and express the answer in liters and milliliter
   a) $250ml \times 5$
   b) $515ml \times 7$
   c) $750ml \times 10$

03)

(a)

i. Find the value of $(+2) + (-4)$ using a number line

ii. Find the value of $1\frac{1}{3} + 2\frac{2}{15}$

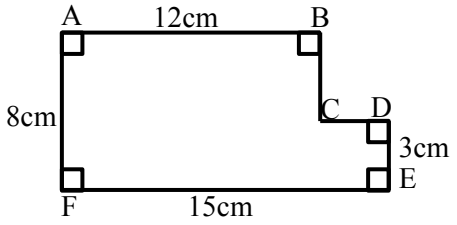
iii. Find the value of $2\frac{2}{3} - 1\frac{1}{3}$

(b) Match below angle with their types

i.	20°	Straight angle
ii.	135°	Right angle
iii.	180°	Acute angle
iv.	265°	Obtuse angle
v.	90°	Reflect angle

04)

a) Find the area of figure ABCDEF using the given dimensions.



b)

i. The price of an apple is Rs.x. The price of a pine apple is Rs.60 more than the price of an apple. Construct an algebraic expression using x for the price of a pine apple.

ii. Simplify $4x + 5y + 2x - y + 7$

iii. Write as a decimal numbers
   a) $\frac{13}{25}$ b) $\frac{321}{500}$

05)

(a) "A" define the whole numbers from 1 to 9

i. Write the set A using the common characteristic

ii. Write the set A by writing the elements of its

iii. Express the set A by a Venn diagram

(b) The birth day of Mala - 2005.09.07

The birthday of Sithumi - 2001.02.04

i. How much Mala is younger than Sithumi

ii. Find the ages of Mala and Sithumi separately at the date of 2023.03.31

06)

i. Draw a circle with the radius is 3cm and name the centre of its as O

ii. Mark the point A on the circle

iii. Draw a circle with radius is 3cm by getting the centre as A. Name a intersection point of two circles as B.

iv. Draw a circle with radius is 3cm by getting the centre as B.

v. Draw another 4 circles with the radius is 3cm by getting the centres of their on the first circle.

vi. Are all the circles drawn with the centres are on first circle go through the point O.

07)

i. Add

Years	Months	Days
12	6	21
3	2	19

ii. Simplify

g	mg
1 7 5	3 7 5 $\times$ 4

iii.

a) Express 24 and 72 as products of prime factors and write as powers.

b) Find the least common multiples of 24 and 72

c) 54$\square$ is a number with three digits. If it is divisible by 6, Write the digit in the unit place of its.