#  <br> Divisional Education Office - Rathnapura <br>  <br> First Term test -2020 

7
Grade 7

Mathematics

Two Hours

## Part I

Answer all questions.

1) Draw all symmetric axes of the given rhombus

2) Find the digital root of 5064
3) Write all factors of 24 and underline prime factors
4) Find the value. $2^{2} \times 3^{2}$
5) Express the set $A=\{$ Composite numbers less than 10$\}$ by Venn diagram.
6) Find the L.C.M. of $15,20,24$
7) What are the $1^{\text {st }}$ day and the last day of the $21^{\text {st }}$ century?
8) Simplify. (-7) + 5
9) $2 x 2 x y x y x z x z x z$ write in index notation.
10) Measure and write the magnitude of the following angle.

11) Simplify. 12-8-4 $\times 3$
12) Fill in the blank with the suitable digit if the number $67 \square 4$ to be divisible by 4.
13) If,
$12=2 \times 2 \times 3$
$18=2 \times 3 \times 3 \quad$ find the H.C.F. of 12 and 18
14) Name the vertex and a arm of the given angle.

15) Write 81 in the index notation with 3 as the base.
16) Express 240 minutes in hours.
17) Name the pair of parallel lines of the given figure.

18) A three wheeler charges $50 /=$ for the $1^{\text {st }} 1 \mathrm{~km}$ and Rs. 60 per kilometer thereafter. Write an expression that Tharindhu has to pay if he travels 8 km by this three wheeler.
19) Write 2 objects which have parallel edges.
20) What is the smallest number which has 1 as the remainder when it is divided by 2,3 , and 4 ?

Part II
Answer only 05 questions
A.

I) Complete the figure.
II) Draw symmetric axes of the figure.
B.
I) Kasuni tells that "Parallelogram has no symmetric axes." Do you agree with the statement? Write reasons for your answer.
II) Draw ABCD square by using set square and a ruler.
III) Join $A C$ and draw a parallel line for $A C$ through the point $B$.
A. Simplify by using the number line.
I) $5+(-2)$
II) $(-2)+(-1)$
III) $(-3)+3$
(06 marks)
B. Fill in the blanks with suitable digits.
I) $(-2)+\square=(-6)$
II) $5+\square=(-7)$
C. Simplify.

$$
(-5.82)+12.5
$$

D. Find the value.

$$
2+6(12 \div 4) \times 8
$$

3) A. Write the type of the $a, b, c, d, e$ angles.

B. Join to the correct types of angles given below.

| Vertex of a book |  |
| :--- | :--- |
| Angle Between two hands of a clock | Static angle |
| Vertex of a door | Dynamic |
| Vertex of a white board |  |

4) 

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 5 |
| 3 | 4 | 6 |  |  |  |
|  |  |  | 7 | 8 | 9 |

A.
I) Write 3 sets as a list of elements by using above numbers.
(03 marks)
II) Write above sets by using special characteristic of the sets.
(06 marks)
B. $\quad P=\{5,10,15\}$ Write set $P$ by using other 2 methods.

05)
A. 2004 A.D.,
I) Write down the decade, century and the millennium to which the above year belong.
(marks 03)
II) How many days are there for the month of February for the above year. Write a reason for your answer.
(03 marks)
B. Fathima's birthday is on 2012-07-05. Her mother's birthday is on 1980-04-01 and her father is elder 02 years 03 months and 14 days than her mother.
I) Find how much older mother to Fathima
II) What is the birthday of her father?
D. Simplify.

| Days | Hours |
| :--- | :--- |
| 12 | 18 |
| 11 | 10 |

6) 

A. Express 72 as a product of prime factors.
B. Wikum takes 2 types of tablets for his illness. He takes these tablets once in 4 hours and 5 hours respectively. If he takes these two tablets at 7.00 a.m., what is the time he will take these two tablets again at once? (03 marks)
C.
I) Write first 05 multiples of 18 .
II) Write first 05 multiples of 27.
III) What are the common multiples of 18 and 27 among the above mentioned multiples?
(01 mark)
07)
A. Fill in the blanks with suitable digits.

(06 marks)
B. If $x=2$ and $y=3$ find the value of the following expressions.
I) $2 x^{2} y$
II) $3 x y^{2}$
(04 marks)
C) Expand the given expressions.
I) $2^{3} m^{2} n^{3}$
II) $a^{3} b^{4}$
(02 marks)

