யா/ஹாட்லிக் கல்லூரி,பருத்தித்துறை.

J/ Hartley College, Point Pedro.

முதலாம் தவணைப் பரீட்சை – 2020 – தரம் 07

First Term Examination – 2020 – Grade 07

கணிதம் I, II **Mathematics I, II**	**32**	**T**	**I, II**	இரண்டு மணித்தியாலம் **Two Hours**

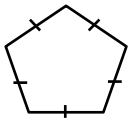
சுட்டெண்
Index No | | | | | |

Mathematics

Part – I

Answer all questions.

01. Find the number of symmetric axes of the given figure.



02. $A = \{$Prime numbers between 30 and 40$\}$ represent the set A in Venn diagram.

03. Simplify $120 - 5 \times 4$

04. Find the digital root of the number 63208

05. Find the highest number below 435 which is divisible by 3 and 4 without any remainder.

06. Write 102 as a product of prime factors.

07. Find the L.C.M of 16, 24 and 32

08. Write 729 as a power of base 9.

09. Which century does belong to the year A.D 1801?

10. Convert $1\frac{7}{10}Kg$ in to g.

11. Add $(-4) + (+2)$ by using a number line

12. Write $(-3.5), (-2.5), (+2.25), (-1.75), (+1.5)$ in ascending order.

13. Draw the reflex angle $A\hat{B}C = 290°$

14. If the price of a packet with 4 Ribbons is Rs. 240.00. Find the price of such 24 packets.

15. Evaluate the value of $5a^3b^2$ by substituting $a = 3$ and $b = 2$.

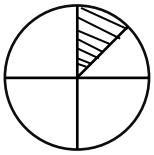
16. Simplify $(-1) + (+3) + (-7)$.

www.lkedu.lk

17. The perimeter of a square is 28cm. Calculate the area of the square.

18. Kairavi was born in the month of January in 1993. In every year he had celebrated his birthday. When year 2008 how many leap years he had celebrated his birthday?

19. Write all the common factors of 18 and 72.

20. 

If the area of shaded portion is $7cm^2$. Calculate the area of whole figure.

Part – II

Answer all the questions.

01. Simplify

i) $4 + 10 \times 3$

ii) $15 - 12 \div 4$

iii) $225 - 24 \times 50 \div 10$

iv) $(4 \times 5) - 12 + 8$

v) The charge for a newspaper advertisement is such a way that the charge for the first 10 words is Rs. 60.00 and Rs.5 for each additional word. Find the total cost for an advertisement having 60 words.

$(\mathbf{2 + 2 + 2 + 2 + 2})$

02.

i) Find a suitable number in the blank such that the number is divisible by a without any remainder.

234 6

ii) Find the H.C.F of the given by writing as a product of prime factors.

128, 64, 80

iii) Calculate the L.C.M of the given number 12, 8 and 28

iv) In a certain country, house representatives are elected every 3 years and the president is elected every 5 years. Both will be elected in 2016, when will they be elected together after 2031?

$(2 + 3 + 3 + 2)$

www.lkedu.lk

03.

i) Write down the given products in index form.

$2 \times 3 \times x \times 3 \times y^2 \times x \times 2$

ii) Write 243 as a power of base 3.

iii) Find the value of each of the following expressions by substituting $x = 4, \quad y = 5$

a) x^2y

b) $2x^2+y^2$

iv) Write 900 as a product of powers of the prime factors.

v) Simplify

$(+4.5) + (-5.9) + (-6.4)$

$(\mathbf{1 + 1 + 4 + 2 + 2})$

04.

i) Add the given

	Years	Month	Days
	10	02	22
+	06	11	15

ii) Subtract

	Years	Month	Days
	07	03	10
−	07	02	27

iii) Kitu, Thiru and Thatun are brothers of the same family. Kitu is the eldest of the family born on 5th June 2000. Thiru is 3 years 4 months and 12 days younger to Kitu. Thatun is the youngest, who is 2 years 8 months 3 days younger to Thiru.

a) Find the year, month and date of birth of Thiru.

b) Calculate the year, month and date of birth of Thatun.

c) What is the age difference between the eldest and the youngest?

$(\mathbf{2 + 2 + 2 + 2 + 2})$

05.

i) Draw a straight line segment $PQ = 6cm$.

ii) Draw line $QR = 5cm$ such that $P\hat{Q}R = 120°$

iii) Draw a parallel line toPQ through R.

iv) Draw line $PS = 5cm$ in the direction of $R\ S\hat{P}Q = 60°$

v) Join R and S, write down whether PS and QR are parallel or not.

vi) Measure and write the angle $R\hat{S}P$ and $Q\hat{R}S$.

vii) What is the special name of the figure $PQRS$?

$\mathbf{1 + 2 + 1 + 2 + 2 + 1 + 1)}$

www.lkedu.lk

06. Refer the given set and answer the questions related to it.

L – { Letters of the word "WOOD APPLE"}

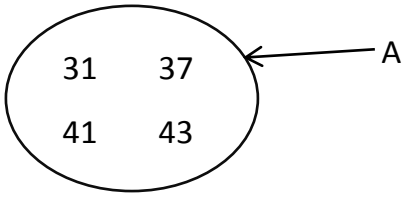
i) Write down the elements of the above set with in double brackets.

ii) How many elements are there in the set?

iii) Write the letters which has many symmetric axes?

iv) Represent the set L in Venn diagram.

v) The set A has been represented by a Venn diagram.



a. Write down the set A in terms of a common property of its elements by which the elements can be clearly identified.

www.lkedu.lk