Richmond College - Galle

First Term text - 2020

Mathematics
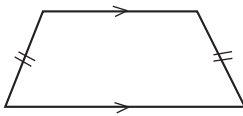
| Grade 07 | 1 hours 30 min. |

Name - : .... Class - : ....

Part I

Answer all the questions

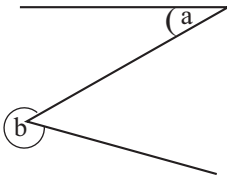(01) How many symmetrical axes in this figure draw them.

(02) Find the digital index of 5421

(03) Write the suitable mathematical operations in the following blanks.

10 .... 2 .... 3 = 11

(04) Write the first 4 multiples of 25

(05) According to the magnitudes name the angles a and b.

(06) What are the conditions of a number to be divisible by 6.
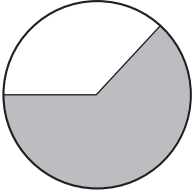
(07) To Which decade does AD 2020 belong ?

(08) Indicate 6 Years in mentions.

(09) Write 64 in index notation with as the index. Find the base.

(10) Name the rectilinear plane figure with 4 symmetrical axes.

(11) When a = 3 , find the value of 2^3a^2.

(12)   Write the shaded part as a Fraction.

(13) Find the Value of $12 \div 3 \times 2$

(14) Simplify, $\dfrac{1}{8} + \dfrac{3}{8}$

(15) Mark the integers +2 and -3 an a number line.

(16) Write 81, as a power of 3.

(17) Choose the suitable symbol to fill the blank. (> , < , =)

    4^3 .... 3^4
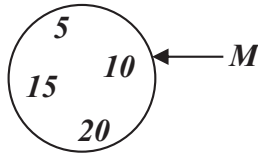
(18) Find the least common multiple of 8, 12

(19) How many symmetrical axes in this figure draw them.

(20) In a box there are 480 oranges and 8 of them were spoilt. The remaining oranges were packed in 4 boxes equally. How many oranges are in a box

(Marks 2 x 20 = 40)

Part II

Answer 5 questions only

(01) a) Simplify

      i) $110 + 10 + 1$ *(02 Marks)*

      ii) $100 - 4 \times 5$ *(02 Marks)*

      iii) $84 \div 4 + 2$ *(02 Marks)*

      iv) $50 - (30 \div 5)$ *(02 Marks)*

  b) The permanent charge for a taxi is Rs. 100. For each travailing kilometer Rs. 50 is Charged.

      i)   Write an algebraic expression for a person who hired this taxi for 6 Km   *(02 Marks)*

      ii)   By solving this expression find the amount he has to pay.   *(02   Marks*

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(02) a) i)   Write the elements of the set M in curly brackets.   *(02 Marks)*

      ii)   Write the description of the set M in curly brackets.   **M** *(02 Marks)*

  b) P { Letters of the word " ELEMENTS" }

      i)   List the elements of the set P   *(02 Marks)*

      ii)   Represent the elements of the set P in a Venn Diagram.   *(02 Marks)*

  c) List the following sets.

      i)   F = { All factors of 6}   *(02 Marks)*

      ii)   B = { Square numbers}   *(02 Marks)*

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(03) i)   Write all the possible ways of 24, as a product of 2 Factors.   *(02 Marks)*

    ii)   By using above (i) write down all the factors of 24.   *(02 Marks)*

    iii) Write 32, as a product of prime factors.   *(02 Marks)*

    iv) Write above in (iii) , as a power.   *(02 Marks)*

    v)   Write the power getting, changing the base and the index of 2^3.   *(02 Marks)*
       Then find the value of it.

    vi) Find the H.C.F. of 24 and 32   *(02 Marks)*

(04) i)   To which century does AD 2020 belong ?   *(02 Marks)*

      ii) What is the last year of this century ?   *(02 Marks)*

      iii) How many days in the year AD 2020 ?   *(02 Marks)*

      iv) Add

years	months	days
5	8	14
+ 2	6	11

                                                                                       (03 Marks)

      v)   Malithas' date of birth is 2008.10.05.
           Find how old malitha is at 2020.04.13   *(03 Marks)*

(05) i)   Write the base and the index of 5^3 *(02 Marks)*

      ii) Write, 3 x 3 x 2 x 2 x 2 as a product of powers.   *(02 Marks)*

      iii) Find the value of 5^2 x 2^2 *(02 Marks)*

      iv) Write, 625 in index notation   *(02 Marks)*

      v)   Write 7 x 7 x 7x a x a in index notation.   *(02 Marks)*

      vi) When x = 2 , y = 3 find the value of $5x^2y$ *(02 Marks)*

(06) i)   Express $\dfrac{9}{10}$ as a decimal.   *(02 Marks)*

      ii) Express 4.05m in metres and centimetres.   *(02 Marks)*

      iii) Fill in the blank of
           $$\begin{array}{r} 432 \\ + \ldots\ldots\ldots \\ \hline 1000 \end{array}$$ *(02 Marks)*

      iv) Find the value represented by 4 in 84726   *(02 Marks)*

      v)   Write the number received by subtracting 1 fram 83000   *(02 Marks)*

      vi) Find the number which is appropriate to the following details.

           * Consists of 3 digits

           * All 3 digits

           * Divisible by 5

           * Get a number by adding the digits at the units place and the hundreds place. Then the digit
             at the tens place was subtracted from the number you obtained. Then the answer is 11

           * Less then 900   *(02 Marks)*