ශ්‍රී සුමංගල විද්‍යාලය - පානදුර

Sri Sumangala College - Panadura

ප්‍රථම වාර පරීක්ෂණය - 2020 මාර්තු

1st Term Test - March 2020

ශ්‍රේණිය Grade	විෂයය Subject	පත්‍රය Paper	කාලය Time
09	ගණිතය	I.II	පැය 03

නම :- ..... පංතිය :- .....

- Answer all the questions

Part A

1) If the price of a pen is Rs.12. Find the price of 3 such pens.

2) Convert $I0II_2$ in to decimal number.

3) The n^{th} term of a number sequence is 8n+1. Find its 5^{th} term.

4) Write the reciprocal of $7\frac{1}{3}$

5) The production price of a pair of shoes is Rs.550 and its selling price Rs.700. Find the profit gained by pair of shoes.

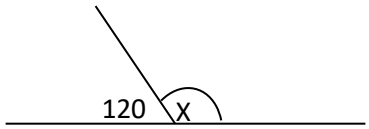
6) Make the followings in ascending order $2\frac{1}{3}$, 0.5, -2, 1.001, $\frac{3}{4}$

7) Expand X(2b+1).

8) Find the volume of cube whose one side is 10cm.

9) Convert 3500ml in to litres.

10) Find X



11) Write the next two terms of following number patten -6, -1, 4, 9, …. ., ….

12) $(x+5)(x+3) = x^2 + \square\, x + \square$ Fill in the blank cages.

13) The cost price of an item is Rs.700 and the vendor gain 10% loss. Find the loss amount he gained.

14) Factorise 3x+6

15) Simplify $\frac{3}{4} \times \frac{1}{3}$

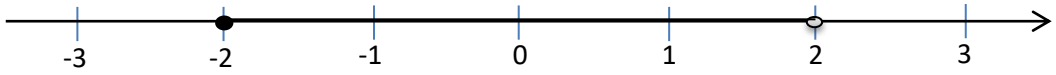
16) Find the value of 3X – Y when X=2 , Y= -1

17) A vendor gave 30% discount for a book worth Rs.6000. Find the discount he gave?

18) Simplify $\frac{2}{5} \div 3$

19) Find $\frac{3}{4}$ of 800m.

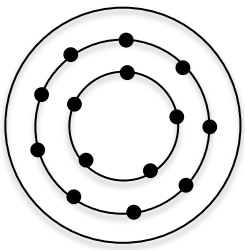
20) Write the inequality represent in below number line



Parts B

- Answer all the questions

1) The Following diagram shows an arrangement of bulbs in a pandol.



I) Find the number of bulbs in 4^{th} circular frame.

II) Find the bulbs in n^{th} circular frame using n.

III) Find the number of bulbs in 10^{th} circular frame.

IV) If there are 49 bulbs in last circular frame How many circular frames are in the pandol.

2)

I) Fill in the blank cages.

$$\begin{array}{r} 1\ 0\ 1\ \square_{two} \\ +\quad 1\ \square\ 1_{two} \\ \hline 1\ \square\ \square\ 0\ 0_{two} \\ \hline\hline \end{array}$$

II) Simplify the following binary numbers.

$$\begin{array}{r} 1\ 0\ 1\ 1_{two} \\ +\quad 1\ 1\ 1_{two} \\ \hline \\ \hline\hline \end{array} \qquad \begin{array}{r} 1\ 0\ 1\ 0\ 1_{two} \\ -\quad 1\ 1\ 1\ 1_{two} \\ \hline \\ \hline\hline \end{array}$$

III) Simplify the following fractions

a) $\frac{1}{5}$ of $\left[\frac{2}{10} \div \frac{1}{2}\right]$

b) $\frac{1}{3}$ of $\frac{3}{5} + \frac{2}{3}$

3) There is a square shaped land and a road with 6m width is situated along the 2 adjacent sides of the land.

I) If the length of a side a square land is X meters. Draw a sketch diagram to show above information.

II) Show that the area of the land with road is $X^2 + 12X + 36$

IV) Simplify the following expressions

i) $X^2 + 2X + 4X + 8$

ii) $(3+X)(6-X)$

4) Nimal went $\frac{4}{5}$ of his journey by Train and $\frac{2}{3}$ of remaining by bus and he went the rest 2km by a three wheeler.

I) What fraction he travelled by bus out of the total distance he travelled.

II) What fraction which he travelled by train and bus of his journey.

III) What fraction which he travelled by three wheeler of his journey.

IV) Find the total distance he travel in kilometers.

5) a) A person borrowed 20kg of beans for Rs. 3000 and 2kg of beans were removed because of spoilt

I) Find the cost price of 1kg of beans.

II) Find the selling price of 1kg of remaining beans to gain 20% profit.

III) Find amount of profit gained by selling 1kg of beans

b) A broker charges Rs. 90 000 when selling a land worth Rs. 3 000 000. Find the percentage of commission he charged.