Department of Education – Western Province

Second Term Evaluation - 2018

Grade 07 **Mathematics** **Time : 02 Hours**

Name:…….. Class: ……

Part I

- **Answer all the questions on this paper itself.**
- **Each question carries 02 marks.**

01. A = { Digits of the number 50250}. Write the set A by listing its elements.

02. Find the value. 6 + 4 ÷ 2

03. Write all the factors of 18.

04. When a =2 and b = 3, find the value of ab^2.

05. Subtract.

	Months	Days
	5	12
−	2	23

06. Add. (-2) + (+ 8)

07. Draw an acute angle with the arms AB and BC.

08. Find the Least Common multiple of 6, 8, 12.

09. Write the century that the year 2000- 10- 30 AD belongs to.

10. Add.

	Years	months	days
	2	06	20
+	3	07	15

11. 12□4 is a four digit number which is divisible by 4. Write a digit which is suitable for the blank box.

12. How many axes of symmetry are there in an equilateral triangle?

13. Write the following product in index form.

5 x 5 x a x 5 x a

14. From the following fractions, select and underline the improper fractions.

$\frac{7}{9}$, $\frac{5}{5}$, $\frac{2}{3}$, $\frac{6}{5}$, $\frac{4}{9}$

15. Fill in the blanks using the symbols > or < or = .

$3\frac{1}{4}$ ..... $3\frac{3}{8}$

16. Write the following fraction as a decimal number.

$\frac{3}{5}$

17. Write a suitable number for the blank.

62.1 ÷ ..... = 6.21

18. Simplify. $\frac{1}{6} + \frac{5}{12}$

19. *p* is a number. Write the number which is *a* less than the number *p* , in terms of *a* and *p*.

20. Express in milligrams. 3g 125 mg

Part II

- **Answer the first question and another 04 questions only.**
- **First question carries 16 marks and other questions carry 11 marks each.**

01. (a) It is decided to give every child in a certain hostel, a trouser and a shirt. Some information relevant for that is given in the following table.

Quantity of material needed for a child (m)		No of children	Price of 1m of cloth (Rs)	
trouser	Shirt		trouser	Shirt
2.25	1.5	40	200	150

For all the boys in the hostel,

i. Find the total quantity of material needed to saw shirts.
ii. Find the total quantity of material needed to saw trousers.
iii. Find the total cost of material needed to saw the cloths.

(b) A fruit seller,

- Bought a mango for Rs. *a* and a pine apple for Rs. *b.*
- Sold a mango for twice the buying price of a mango.
- Sold a pine apple for Rs. 5 more than the three times the buying price of a pine apple.

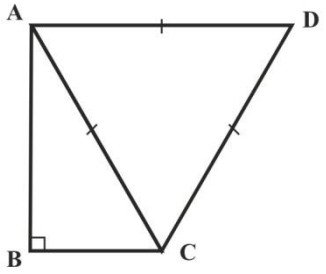
i. Write the selling price of a mango in terms of *a.*
ii. Write the selling price of a pine apple in terms of *b.*
iii. Nimal bought 3 mangoes and a pine apple from the fruit seller. Write the total amount spent by Nimal in terms of *a* and *b* and express it in simplest form.

02. (a) Simplify and express the answer in simplest form.

(i) $\frac{5}{6} + \frac{1}{4}$ (ii) $\frac{7}{8} - \frac{5}{6}$ (iii) $1\frac{1}{2} + 2\frac{1}{3}$

(b) A man owned 2 hectares of land. He gave $1\frac{1}{4}$ hectares of it to his son. Find the remaining portion of land.

03. According to the information given in the figure, answer the following questions.



i. Name a right angle triangle.
ii. Name a scalene triangle.
iii. Name a regular polygon.
iv. If AB = 8cm, BC = 6cm and AC = 10cm, find the perimeter of ABCD quadrilateral.
v. Nimal states that ABCD is a concave polygon. Do you agree with his statement? Give reasons.

04. (a) Solve.

(i) $x + 2 = 3$ (ii) $3x - 4 = 8$

(b) Build up a simple equation for the following statement.

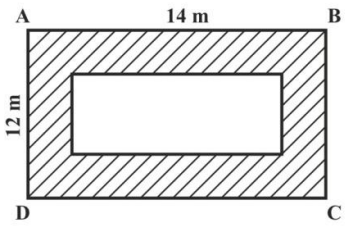
A book costs Rs. *a* and a pencil costs Rs. 10. Rs. 110 is needed to buy 4 such books and 3 pencils.

(c) A lorry which transport goods, charges Rs. *n* to transport a mass of 1kg. The total mass of the goods needed to be transport is *m* kilograms. The total amount charged for that was Rs. *p*.

i. Write a formula for *p*, in terms of *m* and *n*.
ii. If $n = 10$ and $m = 250$, find the value of *p*.

05. (a) Area of a rectangle is 36 cm^2. Write two pairs of values for the length and the breadth of it.

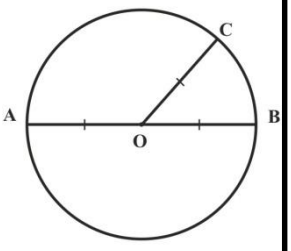
(b) ABCD is a rectangular shaped land. The shaded portion which is 2m wide, is covered with grass. Flowers were grown in the remaining portion of land.



i. Find the area of the ABCD land.
ii. Find the length and the breadth of the portion covered with flowers.
iii. Find the area of the portion covered with grass.

06. (a) Length, breadth and the height of a cuboid shaped box is 1.2m, 0.9m and 75cm respectively. Find the volume of the box in cubic centimeters.

(b) Volume of a cuboid shaped box is 192cm^3. If the length of it is 8cm and the height of it is 4cm, find the breadth of it.



(c) Using the letters given in the circle, write down the centre, radius and the diameter of it.

(d) Construct the circle with the diameter 8cm.

07. i. Multiply. 12g 75mg x 12

ii. Divide. 3kg 750g

iii. For a wall decoration, 7 pieces of ribbon is needed. If the length of one piece of ribbon is 8cm 6mm, find the total length of ribbon needed for the decoration.

iv. 5m and 8cm of cloth is needed to saw 8 flags of same size. Find the length of the piece of cloth needed to saw one such flag.