PROVINCIAL DEPARTMENT OF EDUCATION - NORTH WESTERN PROVINCE

First Term Test 2018

Mathematics

Grade 07 **Time : 2 hours**

Name / Index No.

Part I

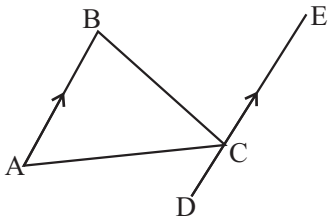
- **Answer all questions on this paper itself.**
- **Each question carries 2 marks.**

01. Fill in the blanks.

	Number	Divisible by 2	Divisible by 3	Divisible by 6
(i)	42	.....	Yes	Yes
(ii)	698	Yes	.....	No

02. Pathum's date of birth is 2010-04-17. Find his age on 2018-03-02.

03. Name the parallel lines of the figures given below.



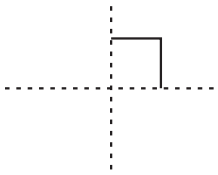
04. Using the knowledge of angles fill in the blank cages.

Acute angle	+	.....	=	Obtuse angle
.....	+	Right angle	=	Straight angle

05. Write in index notation,

$a \times a \times b \times b \times b$

06. Complete the figure given below so that to obtain a bilaterally symmetric figure.



07. Evaluate.

$5 \times 4 - 4 =$

08. Find the L.C.M. of the numbers given below.

32 , 48

09. When $x = 3$, Find the value of $2x^2$.

10. Write the second and the third multiple of 6.

11. Write the first date (Year, month and day) of 21st century.

12. Evaluate,

(-3) + 8

13. Denote the set of letters of the word 'SRI LANKA' in a Venn diagram.

14. It is needed to cut piece of wires in equal length by using two iron rods of length 15cm and 27cm. Find the length of a piece of wire that is cut.

15. Arrange in ascending order,

4, (-5), 8, (-2), 0

16. Fill in the blanks using the knowledge of angles.

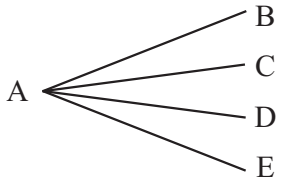
Vertex	Arms	Angle
A	BA, AC	.....
Q	.....	$P\hat{Q}R$

17. Simplify, $\frac{2}{5} + \frac{1}{5}$

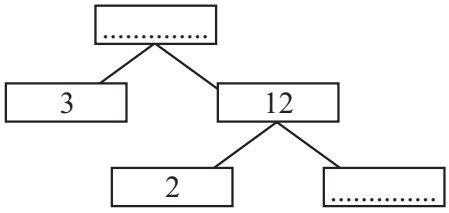
18. Fill in the blank cages.

$$\begin{array}{r|l} & 2\square \\ \hline 5 & 10\square \\ & 10 \\ \hline & 0\square \\ & 5 \\ \hline & 3 \end{array}$$

19. According to the figure given below, what is the number of acute angles?



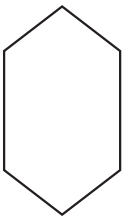
20. The diagram used to find the factors of a number is given below. Fill in blanks of it.



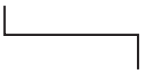
Grade 07 **Part - II** **Mathematics**

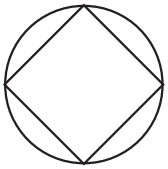
- **Answer to the first question and 04 other questions.**
- **First question carries 16 marks and other questions carry 11 marks.**

01. (a) Copy the figures having bilateral symmetry on your answer sheet and draw the axes of symmetry.

(i) 

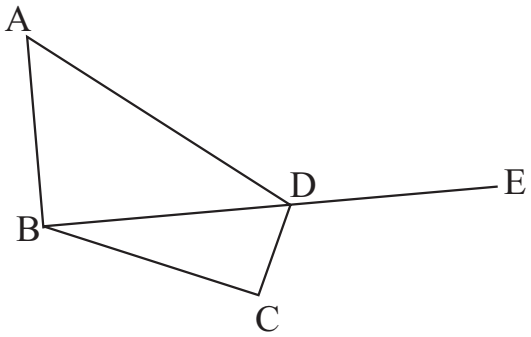
(ii) 

(iii) 

(iv) 

(08 marks)

(b) Write down the magnitude of each angles using the given figure.



(i) $A\hat{B}C$ =

(ii) $A\hat{B}D$ =

(iii) $A\hat{D}E$ =

(iv) $B\hat{A}D$ =

(08 marks)

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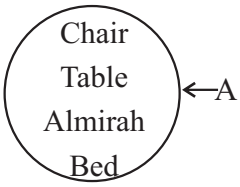
02. (a) (i) Write down the set A by listing its elements. (02 marks)



(ii) Write down the set A in terms of a common property of its elements. (02 marks)

(iii) Following is a set represented by a student. Explain whether it is true or false by giving reasons.

$$P = \{ t, r, e, e \}$$

(02 marks)

(b) Write down the set of letters of the word ''MATTAKKULIYA'' by listing its elements. (02 marks)

(c) Tharusha said that "Rich people in our village" can not be considered as a set. Do you agree with this? Give reasons. (03 marks)

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03. (a) (i) Write 45 and 60 as a product of its prime factors. (02 marks)

(ii) Find the H.C.F. of 45 and 60. (02 marks)

(iii) Bells of 3 clocks ring at intervals of 4 minutes, 8 minutes and 12 minutes respectively. If they all ring together at 4.00 a.m, at what time will they ring together again? (03 marks)

(b) Simplify,

(i) 6 + 3 x 3 - 1 (02 marks)

(ii) 5 x (6 + 4) 2 (02 marks)

04. (a) Fill in the blanks using the suitable numbers or unknown terms.

(i) $3 \times \square \times a \times a \times a = 15a^3$ (01 mark)

(ii) $2 \times \square \times y \times y \times \square = 10y^3$ (02 marks)

(b) Write down $12x^2y^3$ in expanded form. (02 marks)

(c) When a = 3 and b = 5, find the value of each of the followings.

(i) a^2b^2 (03 marks)

(ii) $2a^2 \times 3b$ (03 marks)

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05. (a) Shiromi's sister Nayomi is 2 years, 5 months and 12 days elder to Shiromi. Nayomi's friend Pubudu is 3 years, 2 months and 17 days younger to Nayomi. If Shiromi's date of birth is 2002-08-20,

(i) Find the date of birth of Nayomi. (02 marks)

(ii) Find the date of birth of Pubudu. (02 marks)

(iii) Out of these 3 children whose birthday falls on a leap year? (01 mark)

(b) Simplify

(i) (-7) + 5 + (-1) (02 marks)

(ii) (-10) + (-10) + 5 (02 marks)

(iii) 7 + (-3) + (-4) (02 marks)

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06. (i) Draw any triangle of ABC. (01 mark)

(ii) Using a straight edge and a set square, draw a straight line through C parallel to AB. (02 marks)

(iii) Draw a straight line though A parallel to BC. (02 marks)

(iv) Draw a straight line through B parallel to AC. (02 marks)

(v) Name the intersecting points of above 3 parallel lines as P, Q and R. (02 marks)

(vi) Measure and write down the length of the above pair of a parallel line. (02 marks)

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07. (a) Simplify

(i) $\frac{1}{7} + \frac{2}{7}$ (01 mark) (ii) $\frac{3}{8} + \frac{1}{4}$ (02 marks)

(b) (i) Draw a number line having numbers from -6 to +5. (02 marks)

(ii) Using the above number line find the value of 4 + (-9). (03 marks)

(c) Fill in the blanks using the symbols < and >.

(i) (-2) ..... 0 (01 mark)

(ii) (-8) ..... (-3) (01 mark)

(iii) (-6) ..... (+5) (01 mark)

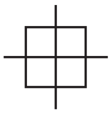
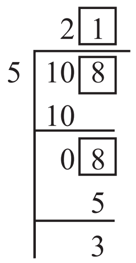
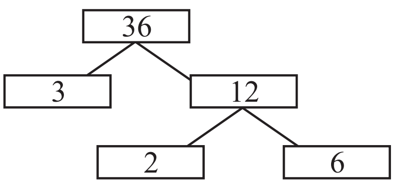
Grade 07 **First Term Test 2018** **Mathematics**

Answer Sheet

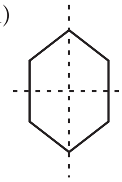
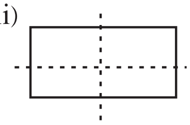
Part I

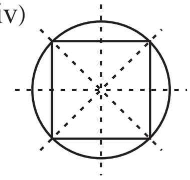
01.

	Number	Divisible by 2	Divisible by 3	Divisible by 6	Marks	
(i)	42	Yes	Yes	Yes	01	
(ii)	698	Yes	No	No	01	02

No.	Answer	Marks	Total
02.	08 years 01 month 15 days		02
03.	AB		
	DE		02
04.	Right angle / Acute angle	01	
	Right angle	01	02
05.	a^2 x b^3		02
06.			02
07.	16		02
08.	96		02
09.	18		
	2 x 3^2		02
10.	12, 18		02
11.	2001 - 01 - 01		02
12.	5		02
13.	{S, R, I, L, A, N, K}		02
14.	3cm		02
15.	(-5), (-2), 0, 4, 8		02
16.	$B\hat{A}C$		
	PQ , QR		02
17.	$\frac{3}{5}$		02
18.			02
19.	06 Acute angles		02
20.			02
			40

Part II

01. (a) (i)  (ii) 

(iii) (iv) 

2x4 — 08

(b) Measuring angles — 2x4 — 08

16

02. (a) (i) {chair, table, almirah, bed} — 02

(ii) {Furnitures} — 02

(iii) M = {t, r, e} — 01

(b) (i) {M, A, T, K, U, L, I, Y} — 03

(ii) Yes. For a correct answer — 03

11

03. (a) (i) 45 = 3 x 3 x 5

60 = 2 x 2 x 3 x 5 — 02

(ii) 15 — 02

(iii) 15 — 02

(b) (i) 6 + 9 - 1

14 — 02

(ii) 5 x 10 2

5 x 5

25 — 03

11

04. (a) (i) 5 — 01

(ii) 5 ; y — 02

(b) 2 x 2 x 3 x x x x x y x y x y — 02

(c) (i) 3^2 x 5^2

9 x 25

225 — 03

(ii) 2 x 3^2 x 3 x 5

2 x 9 x 15

270 — 03

11

05. (a) (i) 2002 - 08 - 20
- 2 - 05 - 12
2000 - 03 - 08 — 02

(ii) 2000 - 03 - 08
+ 3 - 02 - 17
2003 - 05 - 25 — 02

(iii) Nayomi — 01

(b) (i) -2 + -1
-3 — 02

(ii) -20 + 5
-15 — 02

(iii) 7 + (-7)
0 — 02

11

06. (i) Drawing the triangle ABC — 02
(ii) Drawing the parallel line — 02
(iii) Drawing the parallel line — 02
(iv) Drawing the parallel line — 02
(v) Naming intersecting points — 02
(vi) Measuring the length of two sides. — 01

11

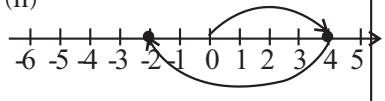
07. (a) (i) $\frac{3}{7}$ — 01

(ii) $\frac{3}{8} + \frac{2}{8}$

$\frac{5}{8}$ — 02

(b) (i) Drawing the number line — 02

(ii)



02

-2 — 01

(c) (i) -2 < 0 — 01

(ii) -8 < -3 — 01

-6 < +5 — 01

11