

First Term Examination 2015

Mathematics

Grade 07

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Time: 2 hours

Name/ Index No.

Part I

- Answer all questions on paper itself.

01 Price of 1kg of rice is Rs. 83.00. What is the price of 4kg of rice.

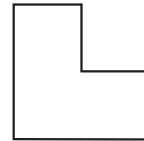
02 What is the century does the year 1998 belongs ?

03 "235 is divisible by 4" Write suitable digits for the blank space.

04 Fill in the blanks using "> or <"
(-5) (-2)

05 Write the set of digits of number 30503.

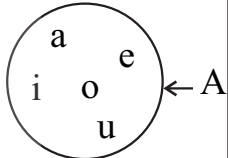
06 How many symmetrical axis are there in this figure ?



07 Write the number 81 as power of 3.

08 Write a equalent fraction for $\frac{2}{3}$

09 Draw the angle \widehat{ABC} as 50° by using protractor.

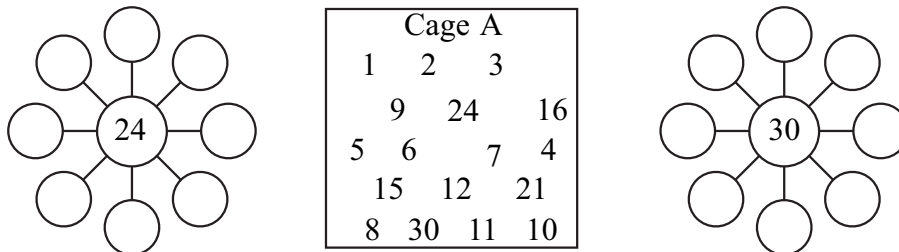
10	If $a = 3$, $b = 2$, find the value of $2a + b$.										
11	Write 36 as a product of its prime factors.										
12	A certain tea packet is in the market of weight 250g. 12 such packets are packed in a box. What is the total weight of tea in the box ?										
13	A meeting was started at 12.45 p.m. and ended at 2.50 p.m. What is the amount of time taken in the meeting ?										
14	Convert $3\frac{2}{5}$ in to improper fraction.										
15	Write the direct numbers in ascending order. (-1), 2, (-5), (-2), 5										
16	Write the set A by listing elements.										
											
17	Name the angle between the line segments xy and yz .										
18	Add.										
	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">kg</td> <td>g</td> </tr> <tr> <td style="padding-right: 20px;">23</td> <td>95</td> </tr> <tr> <td style="padding-right: 20px;">+ 12</td> <td>28</td> </tr> <tr> <td colspan="2" style="text-align: center;"><hr style="width: 100%;"/></td> </tr> <tr> <td colspan="2" style="text-align: center;"><hr style="width: 100%;"/></td> </tr> </table>	kg	g	23	95	+ 12	28	<hr style="width: 100%;"/>		<hr style="width: 100%;"/>	
kg	g										
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19	Simplify the given fraction. $\frac{6}{7} - \frac{2}{7} + \frac{1}{7}$										
20	What is the angle the minutes hand rotates from the time 6.00 a.m. to 6.15 a.m. ?										

Part - II

- Answer first question and four other questions. 16 marks in first question and 11 marks in each other questions.

01 Remind the lesson "Factors and Multiples" by studying in the classroom.

(a) Obtain the factors of 24 and 30 using the appropriate factors in cage A.



(b) (i) Complete the table.

Number	As a product of prime factors
24	
30	

(ii) Using prime factors find the

H. C. F of 24 and 30

L. C. M. of 24 and 30

(c) In a pillar blue, red and yellow signals are sent out as follows.

- Blue signals 5 times per hour
- Red signals 6 times per hour
- Yellow signals 10 times per hour

On a saturday all three signals appeared at 2030h. Find the day and the time that all three signals appear together again.

02 (a) The distance from a town A to town B is 1km. Starting from A Namal walks $\frac{3}{7}$ of the total distance. Sunimal walks $\frac{5}{14}$ of the total distance and Prasanna walks $\frac{8}{21}$ of the total distance.

(i) Who walked the greatest distance from A ?

(ii) Who walked the shortest distance from A ?

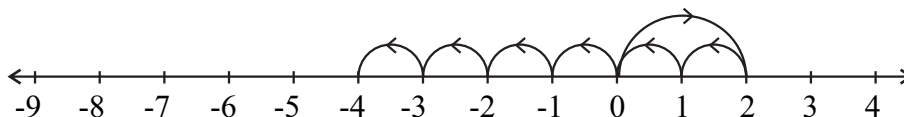
(b) A, B and C were given $\frac{1}{5}$, $\frac{3}{10}$ and $\frac{2}{5}$ portions, respectively of a land and the remaining portion was given for D.

(i) What fraction of the land A, B and C got ?

(ii) What fraction of the land did D get ?

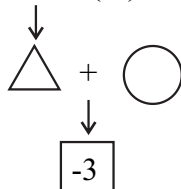
(iii) What fraction of the land did B get more than A ?

03 (a)



The above diagram shows how the numbered line is used to add two integers. Write using appropriate symbols the two numbers added and the answers.

(b) Fill the blanks of the following using the knowledge of addition of directed numbers. $(-4) + (-3)$



(c) Write the suitable values in the blank cages.

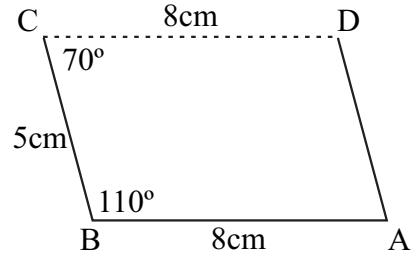
(i) $\square^2 \times \square^3 = 9^0$

(ii) $3^2 \times 3 \times \square^0 = 3^5$

04 (i) Draw $\triangle ABC$ such that $AB = 8\text{cm}$, $BC = 5\text{cm}$ and $\angle ABC = 110^\circ$ as shown in the diagram.

(ii) Next draw $\triangle BCD$ such that $CD = 8\text{cm}$, $\angle BCD = 70^\circ$. Join AD .

(iii) Measure and write the values of $\angle CDA$ and $\angle BAD$.



05 (a) x and y are two bags containing the same rice. The weight of the rice in x bag is $8\text{kg } 150\text{g } 340\text{mg}$. When $2\text{kg } 340\text{g } 650\text{mg}$ from bag x is put to y , the weights of x and y are equal.

(i) Find the weight of rice remaining in bag x .

(ii) Find the weight of rice bag y originally had.

(iii) Find the total weight of rice in bags x and y .

(b) (i) Find the total weight of 6 sugar bags each of weight $2\text{kg } 242\text{g}$.

(ii) If the above sugar is divide in to four equal parts and put in to four bags find the weight of sugar contained in a bag.

06 (a) A train leaves Colombo Fort at 0925h reaches Polgahawela 1 hour and 12 minutes after leaving Colombo Fort. If stops at Polgahawela for 15 minutes it reaches Kandy 1 hour and 25 minutes after leaving Polgahawela.

(i) At what time does this train reach Polgahawela ?

(ii) Find the time it left Polgahawela.

(iii) At what time does this train reach Kandy ?

(b) (i) Write in expanding form $a^2 b^3 c^2$

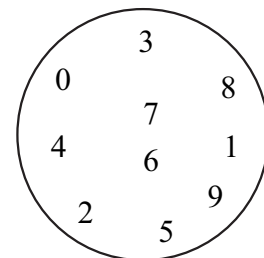
(ii) If $x = 3$, $y = 2$ find the value of $4x^3 y^2$

07 (a) Write 2 sets of the numbers given in the venn diagram below.

(i) By writing a description

(ii) As a listing

(iii) By a venn diagram



(b) Draw a picture having 4 axes of symmetry.

(c) Select and write three letters having symmetry from the English alphabet.