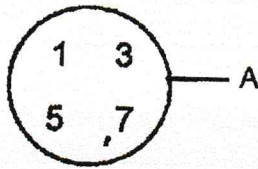| Grade 7	
SECOND TERM TEST – 2017 JULY	
MATHEMATICS	Time 2 hours
Name :	

Part I

Caution :
- Answer all questions in this paper
- Each question carries 02 marks

1)
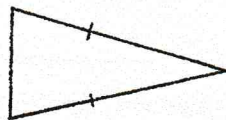
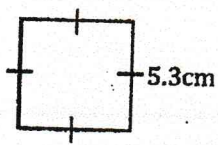Draw axes of symmetry of this figure

2)

Write the set shown in this Venn diagram in another method

3) Expand $3x^2$

4) Simplify $3 - 2(3 + 1)$

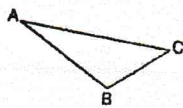5) Write a unit fraction and a proper fraction

6)

Find the area of the square

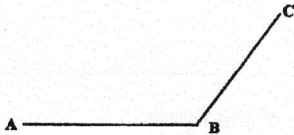7) Find the value $(+5) + (-2)$

8)

What is the name of the triangle ABC according to sides?

9) Write 54 as a product of prime factors

10) Solve $5x + 2 = 12$

11) Write $2\frac{4}{10}$ as a decimal

12) Measure and write the value of $A\hat{B}C$

13) A vehicle can run 550m distance by 1ℓ of petrol. Find how much liters of petrol are necessary to run 1650m distance.

14) Simplify algebraic terms $8x + 3y - 2x - y$

15) When a = 3, b = 2, find the value of expression $5a - 2b$

16) Write in index notation $5 \times 5 \times y \times y \times 5$

17) Find the value $\dfrac{0.0543 \times 1000}{100}$

18) Find the least common multiple of 3 and 4

19) To which century the year 2017 is belonged?

20) Write in words $\dfrac{x + 2}{2}$

Part II

1) Build up equations for below instances

   i. When two is subtracted from x, the answer is 7
   ii. When 5 is added to the three times of y, the result is 26
   iii. When x is divided by three and 4 is added to it, the answer is equal to half of x
   iv. Solve 5x + 2 = 22 by using flow diagram
   v. Solve 4x – 5 = 19 by algebraic method
   vi. If m = 3, x = 4, c = 5, of y = mx + c, find the value of y

2) i. Draw a line segment by using a straight edge
   ii. Mark points A and B such that AB = 7 cm on it
   iii. Draw the arm AX such that $B\hat{A}X = 60°$ on it
   iv. Draw the arm BY such that $A\hat{B}Y = 50°$
   v. Mark the intersecting point of lines AX and BY as C
   vi. Measure and write the magnitude of $A\hat{C}B$
   vii. Measure and write the magnitude of $X\hat{C}Y$
   viii. Write the relation in between angles $X\hat{C}Y$ and $A\hat{C}B$

3) i. The length and breadth of bottom of a cuboid shaped vessel are 20 cm and 8 cm respectively. The height of it is 5 cm. $\frac{1}{5}$ of that vessel is filled with water. Find the volume of water.

   ii. Find the value
      8ℓ   4000 mℓ ÷ 3

   iii. Simplify

a)		b)		c)	
km	m	m	cm	ℓ	mℓ
15	488	3	563	20	235
+ 30	856	x	4	– 15	166

4) i. Draw a line segment PQ = 4 cm. Draw two circles by taking points P and Q are as centers and 3cm as radius
   ii. Name intersecting points of line PQ by two circles as A and B
   iii. Measure lengths of PA and QB
   iv. Extend PB such that it meets the circle of center Q at R
   v. How do you call the line AR?

5) i. Write the formula of area of a rectangular shape
   ii. Find the value of (-5) + (+4) + (-7)
   iii. Simplify $2\frac{1}{3} + 3\frac{1}{2}$

iv. A = {Prime numbers from 1 to 20}
   Show the set A in a Venn diagram
v. Write 48 and 60 as product of prime factors
vi. Find the highest common factor of 48 and 60
vii. Find the least common multiple of 48 and 60

6) a) Draw two slant parallel lines by using set square and name them as AB and CD

   b) The length and breadth of a sheet are 45 cm and 35 cm respectively. A piece of rectangular sheet of length 24 cm and breadth 15 cm is cut and removed from it.
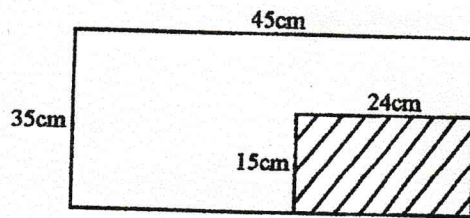
   i.   Find the area of whole sheet
   ii. Find the area of cut piece
   iii. Find the area of remaining part
   iv. Find the perimeter of remaining part

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