

# ***City International School***

## **Second Summative Assessment 2015 - 2016**

**Date : 28/03/2016**

**Std : VII**

**Subject : Mathematics**

**Marks : 60**

**Time : 2 hrs**

Answer to this question must be written on the paper provided separately.

You will not be allowed to write during the first 15 minutes.

This time is spent in reading the question paper.

The time given at the head of this paper is the time allowed for writing the answers.

Attempt all questions from Section A and three questions from Section B.

The intended marks for questions or parts of questions are given in the bracket ( ).

All working including rough work must be clearly shown and must be done on the same sheet as the rest of the answer.

### **SECTION – A [30 MARKS]**

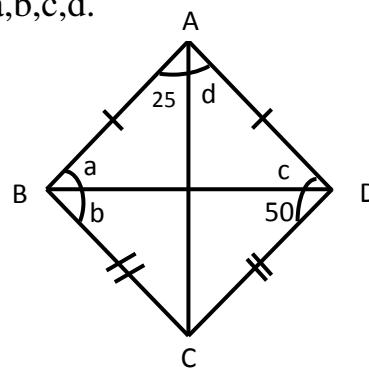
**[Answer all the questions from this section]**

- Q. 1**
- a. What percent of 1.5m is 60cm? (2)
  - b. State the quadrant in which the given points lie (2)
    - i.  $P(-4, -7)$                       ii.  $Q(-7, 1)$
  - c. A car travels a distance of 230 km in 1 hour 55 minutes. (3)  
What is the speed of the car?
  - d. Two sides of a parallelogram are in the ratio 5:3 and its perimeter is 80cm. (3)  
Find the length of each of its sides.
- Q. 2**
- a. Find the arithmetic mean of the following scores 5, 10, 17, 19, 20, 27, 28 (2)
  - b. Factorise  $x^2 + y - xy - x$  (2)
  - c. Construct  $\Delta ABC$  with base  $BC = 5\text{cm}$  and  $\angle B = 75^\circ$  and  $\angle C = 45^\circ$  (3)
  - d. The angles of a triangle are in the ratio 4:2:3. (3)  
Find the measure of each of the angles.
- Q. 3**
- a. What sum will yield ₹1125 as simple interest in 2 years at 9% per annum? (2)
  - b. Decrease 180 by 20% (2)
  - c. Find the volume and the surface area of a cuboid of length 5m, (3)  
breadth 3.5m and height 2.4m.
  - d. Karim bought a pendrive for ₹400 and sold it for ₹520. (3)  
Find his gain and gain percent

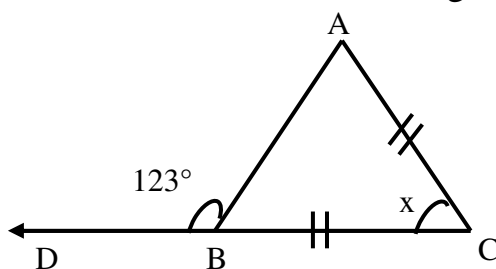
## SECTION – B [30 MARKS]

**Attempt any three questions in this section.**

- Q. 4** a. A train 180m long crosses a standing man in 12secs. Find the speed of the train in km per hour. (3)
- b. For an election two candidates contested. The total votes polled were 6300. If 1 candidate got 72% of the votes, find the number of votes received by each. (3)
- c. ABCD is a kite in which  $AB = AD$ ,  $CB = CD$  and the diagonals AC and BD intersect at O at right angles. If  $\angle BAO = 25^\circ$  and  $\angle CDO = 50^\circ$ , find the measure of each of the angles, marked a, b, c, d. (4)



- Q. 5** a. A buys an article for ₹650 and sells it to B at a profit of 20%. B sells it to C at a loss of 20%. What does C pay for it? (3)
- b. Factorize  $81a^4 - 121x^2$  (3)
- c. Draw the graph for the following equation  $x + 5y = 9$ . (4)
- Q. 6** a. Find the simple interest on ₹84000 at 3% per annum for 9 months. Also find the amount. (3)
- b. The area of the four walls of a room 10m long and 7.5 m broad is 77 square meters. Find the height of the room. (3)
- c. Calculate the value of x in the following figure. (4)



- Q. 7** a. Construct a right angled  $\Delta ABC$  in which  $\angle B = 90^\circ$ ,  $BC = 4$  cm hypotenuse  $CA = 5$  cm (3)
- b. How many bricks each of dimensions 25cm by 15cm by 10cm will be needed to construct a wall 2m long, 1m high and 21cm thick? (3)
- c. The following data gives the marks scored by Dhoni in a class test. (4)

English	Math	Science	SS	Hindi
14.5	19	16	10	14

Represent the above data by a line graph.