TEST PAPER: MATHEMATICS

Time: 50 Minutes **Class: 9th C.B.S.E.**

Max. Marks: 30 Marks **Date: 9th January, 2018**

Marking Scheme: *Three questions carry 10 marks each. Questions have 2 subparts each. Subparts (a) and (b) carry 5 marks each.*

Question 1:

a. Construct a △ABC in which BC = 3.4cm, AB – AC = 1.5cm and ∠B=45^0.

b. The radius and the height of a right circular cone are in the ratio 5:12. If its volume is 314 cubic meters, find the slant height and the radius. (Use π = 3.14).

Question 2:

a. i. The perimeter of a triangular field is 540 m and its sides are in the ratio 25:17:12.
Find the area of triangle. [3]
ii. Numbers 50, 42, 35, 2x + 10, 2x – 8, 12, 11, 8 are written in descending order and their median is 25.
Find x. [2]

b. The capacity of a closed cylindrical vessel of height 1 m is 15.4 litres. How many square meters of the metal sheet would be needed to make it.

Question 3:

a. Find the value of p for the following distribution whose mean is 16.6.

x:	8	12	15	p	20	25	30
f:	12	16	20	24	16	8	4

b. Two cones have their heights in the ratio 1:3 and the radii of their bases in the ratio 3:1. Find the ratio of their volumes.