



TEST PAPER: MATHEMATICS

Time: 50 Minutes

Class: 9th C.B.S.E.

Max. Marks: 30 Marks

Date: 19th December, 2018

Marking Scheme: Three questions carry 10 marks each. Questions have two subparts (a) and (b) carrying 5 marks each.

Question 1:

- a. A hollow sphere of internal and external diameters 4 cm and 8 cm respectively is melted into a cone of base diameter 8 cm. Find the height of the cone.
- b. Find the mean of the following distribution:

Class Interval	5	15	25	35	45
Frequency	10	6	8	12	5

Question 2:

- a. Draw a histogram to represent the following data:

Pocket money in Rs.	No. of students
150 – 200	10
200 – 250	5
250 – 300	7
300 – 350	4
350 – 400	3

- b. A metallic sphere of radius 10.5 cm is melted and then recast into small cones each of radius 3.5 cm and height 3 cm. Find the number of cones thus formed.

Question 3:

- a. i. A bag contains 5 red balls and some blue balls. If the probability of drawing a blue ball is double that of a red ball, determine the number of blue balls in the bag. [2]
ii. Perimeter of the rhombus is 100 m and its diagonal is 40m. Find the area of rhombus using Heron's formula. [3]
- b. If the mean of the following distribution is 7.5, find the missing frequency f:

Variable	5	6	7	8	9	10	11	12
Frequency	20	17	f	10	8	6	7	6