TEST PAPER: MATHEMATICS

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

Max. Marks: 30 Marks **Date:** 10th October, 2018

Marking Scheme: *Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.*

Question 1:

a. The length, breadth and height of a cuboid are 15 cm, 10 cm and 20 cm respectively. Find its total surface area.

b. The hollow sphere in which the circus motor cyclist performs his stunts, has a diameter of 7 m, Find the area available to the motor cyclist for riding.

c. If the slant height and the base radius of a cone are 10 cm and 8 cm respectively, then find
   (i) Curved surface area and
   (ii) Total surface area. [Take $\pi = 3.14$]

Question 2:

a. If a right circular cone has radius 4 cm and slant height 5 cm then what is its total surface area?

b. The curved surface area of a right circular cylinder of height 14 cm is 88 cm^2. Find the diameter of the base of the cylinder.

c. The height of a cone is 16 cm and its base radius is 12 cm. Find the curved surface area and the total surface area of the cone (Use $\pi = 3.14$).

Question 3:

a. Find the curved surface area of a right circular cone whose slant height is 10 cm and base radius is 7 cm.

b. Find the radius of a sphere whose surface area is 154 cm^2.

c. Find (i) the curved surface area and (ii) the total surface area of a hemisphere of radius 21 cm.