TEST PAPER: MATHEMATICS

Time: 50 Minutes **Class:** 8th C.B.S.E.

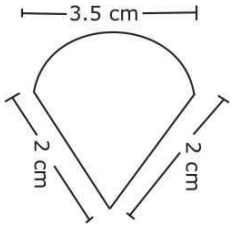
Max. Marks: 30 Marks **Date:** 19th December, 2018

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. Find the volume of a cube whose surface area is 64 m^2.

b. Find the perimeter of the given figure:



c. Factorise:

i. $4y^2 - 12y + 9$

ii. $6xy - 4y + 6 - 9x$.

Question 2:

a. Three metal cubes whose edge measure 3 cm, 4 cm and 5 cm respectively are melted to form a single cube, find its edge.

b. A cylindrical tank has a capacity of 6160 m^3 find its depth if the diameter of the base is 28 m.

c. Divide as directed:

i. $(m^2 - 14m - 32) \div (m + 2)$

ii. $(5p^2 - 25p + 20) \div (p - 1)$

Question 3:

a. Find the side of a cube whose surface area is 2400 cm^2.

b. The radius of a cycle wheel is 35 cm. Find the number of turns required to cover a distance of 1540 m.

c. The surface area of a cuboid is 3328 m^2; its dimensions are in the ratio 4:3:2. Find the volume of the cuboid.