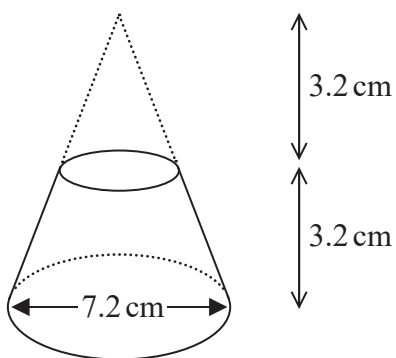
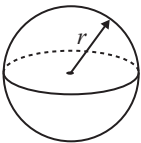


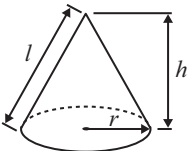
20 Here is a frustum of a cone.



Volume of sphere = $\frac{4}{3}\pi r^3$

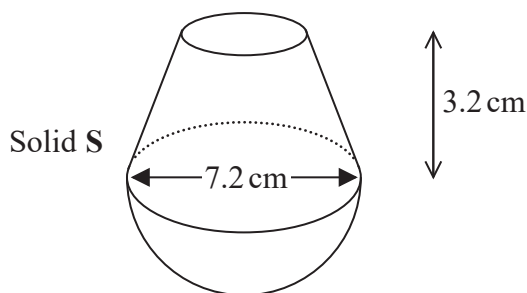
Volume of cone = $\frac{1}{3}\pi r^2 h$





The diagram shows that the frustum is made by removing a cone with height 3.2 cm from a solid cone with height 6.4 cm and base diameter 7.2 cm.

The frustum is joined to a solid hemisphere of diameter 7.2 cm to form the solid S shown below.



The density of the frustum is 2.4 g/cm^3
 The density of the hemisphere is 4.8 g/cm^3

Calculate the average density of solid S.

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.....g/cm³

(Total for Question 20 is 5 marks)



P 5 5 5 8 8 A 0 1 9 2 0