SURFACE AREAS AND VOLUMES

CUBOID

INTRODUCTION

In our day-to-day life we come across various solids which are combinations of two or more such solids.

We shall discuss problems on finding surface areas and volumes of such solids.

Before we proceed further let us recall the formulas for surface area and volume of some of The basic solids:

Cuboid

Let l, b and h denote respectively the length, breadth & height of a cuboid. Then

- (i) Total surface area of the cuboid = 2 (lb + bh + hl) sq units.
- (ii) Volume of the cuboid = area of the base \times height

= lbh cubic units

- (iii) Diagonal of the cuboid =
- (iv) Area of four walls of a room = 2(l+b) h sq unit.



CLASS 10

Cube

If the length of each edge of a cube is a units, then

- (i) Total surface area of the cube = $6a^2$ sq units.
- (ii) Volume of the cube = a^3 cubic units.
- (iii) Diagonal of the cube = a units.
- (iv) Lateral surfaces area of cube = $4a^2$ sq. unit

