NAME: .....

FLOATING AND SINKING

1. C
2. B
3. A
4. B
5. B

6.

a. 100 cm^3

b. 0.13 x 100 = 13 N

c. 13 N

d. float

7.

(i) Weight of the substance in air = 6N

Weight of the substance in water = 4N

Lost weight of the substance in water = 6 - 4 = 2N [1m]

Upthrust acting on the body = Loss of weight of the substance in water

= 2N [1m]

(ii) Weight of water displaced = 2N [1m]

Volume of water displaced = 200 cm^3

Volume of the substance = 200 cm^3 [1m]

R.D. of the substance = wt. of the substance in air/loss in wt in water
= 6N/2N
= 3

[Total 5m]

8.

(i) when the cork is under water, despite its weight, there is some force, called upthrust,

which pushes it upwards[1m].

(ii)
Volume of the body submerged in the liquid - (V), or volume of the liquid displaced - (V) [1m]

Density of the liquid - (d) [1m]

Acceleration due to gravity - (g) [1m]

i.e., Upthrust = V x d x g

[Total 4m]