

PHYSICS

BOOKS - VGS PUBLICATION-BRILLIANT

FLOATING BODIES

Conceptual Understanding

1. A solid sphere has a radius of 2 cm and a mas of 0.05 kg. What is the relative density of the sphere ?

2. An ice cube floats on the surface of a flass of water $\left(densityofice = 0.9g/cm^3\right)$. When the ice melts will the water level in the glass rise ?



3. Why do some objects float on the water? And some sink?



4. Explain density and relative density and write their formulae



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5. What is the value of density of water?



1. Which is denser, water or milk?



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2. Iron sinks in water, wood floats in water. If we tie an iron piece to the same volume of wood piece, and dropped it water, would it sink or float? Make a guess and find out whether yours gucess is correct or wrong with an experiment. Give reasins.



Application To Daily Life Concern To Biodiversity

1. Write any one application of Pascal's principle in daily life.



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Try These

1. Find the pressure at a depth of 10 m in water in water if the atmspheric pressure is 100 kPa.

$$\left\lceil 1Pa = 1N/m^2
ight
ceil \left\lceil 100Kpa10^5N/m^2 = 1atm.
ight
ceil$$



Questions Given In The Lesson

1. Wich objects float in kerosene?



2. Which objects sink in kerosene but float on water?



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3. Which objects sink in water?



4. Why did different objects behave differently



?

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5. What is the relative density of wood?



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6. What is the relative density of glass?



7. Which is denser, rubber or plastic?



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8. Which is denser. Wood or cork?



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9. Classify the above materials as denser than stone and less denser than the stone.



10. If we put a wooden block in kerosene, will it float or sink? Give reasons for your answer.



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Essential Material For Examination Purpose 2 Mark Questions

1. Why does the wooden block float on water even though it is heavier than a marble?



2. What do we mean by 'heavy' what do we mean by 'light'?



3. Relative density of silver is 10.8 What is density of silver in S.I. unit ?



4. Why does a block of plastic released under come up to the surface of water ?



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Previous Summative Assessments Bits

1. A solid sphere has a radius of 2 cm and a mas of 0.05 kg. What is the relative density of the sphere ?

A. 1.39

B. $1.39kg/m^3$

C. 1.49

D. $1.46kg/m^3$

Answer: C

