Indian School Nizwa

WORKSHEET-2

GRAVITATION-FLOATATION

I Answer the following questions

1. Give an example of buoyant force.

2. Buoyant force depends on_____.

   A. the colour of the liquid
   B. the density of the liquid
   C. the depth of the liquid
   D. the weight of the liquid

3. What causes a buoyant force?

4. Why is swimming in sea water easier than in freshwater?

5. What is Archimedes' principle?

6. If a plastic ball floats on the surface of the water on Earth, will it float or sink if placed in a bucket of water on the moon?

7. What happens if the liquid's buoyant force is equal to, greater than, or less than the weight of the solid object to be immersed in the water?

8. What are the primary forces acting on an object when it is submerged in water?

9. Which scientist gave an estimate of the buoyant force acting on a solid object submerged in liquid?

10. If two objects are submerged, is the buoyant force the same for both the objects?

11. How is pressure related to thrust?

12.Name the SI unit of pressure.

13. Why does a truck or a motor-bus has much wider tyres?

14. The cutting edge of a knife should be as sharp as possible. Why?

15. The edge of a drawing pin is sharp and pointed one. Why?

16.What is force of buoyancy?

17.What is the SI unit of density?

18. What is the value of density of water in SI system?

19.Lactometers are used to determine the purity of a sample of milk. On which principle is this instrument based?

II Short Answer Type Questions (Two marks)

20.Describe thrust and write its SI unit. Name one factor on which the effect of thrust depend.

21. Define pressure. Give its mathematical expression and its SI Unit.

22.Why do you prefer a broad and thick handle for your suitcase?

23. Why are railway tracks laid on large sized concrete (wooden) sleepers?