

SATISH CHANDRA MEMORIAL SCHOOL CHAKDAH

EVS QUESTION/ANSWERS

CHAPTER -7

CLASS – V

Q.1) Why do objects float or sink in water?

Ans) The density of an **object** determines whether it will float or **sink** in water.

An **object** will float if it is less dense than water. An **object** will **sink** if it is more dense than water.

Q.2) What do you mean by Density?

Ans) **Density is** a word **we** use to describe how much space an object or substance takes up (its volume) in relation to the amount of matter in that object or substance (its mass). Another way to put it **is** that **density is** the amount of mass per unit of volume. If an object **is** heavy and compact, it has a high **density**

Q.3) Why a ship made of iron and steel does not sink in water?

Ans) It's because an **iron ship** is **not** completely solid. It has full of air filled in it. So the average density of the **ship** as a whole is less than the density of **water**. Therefore immersed portion of the **ship** displaces **water** equal to its weight.

Q.4) Why does a metal needle or paper clip sinks in water?

Ans) A metal **needle** or paper clip has higher density than that of **water**. So when it is dropped into **water**, it falls down into the bottom of **water**. However, if we put it horizontally on the **water** with a lot of caution, it **can float** almost forever due to the surface tension of **water**.

Q.5) How can you make an egg float on water?

Ans) **Adding salt** to the **water increases the density** of the solution as the **salt increases** the mass without changing the **volume** very much. When enough **salt** is added to the **water**, the saltwater solution's **density** becomes higher than that of an egg, so the egg will then float!

Q.6) Why is water important as a solvent?

Ans) **Water** is capable of dissolving a variety of different substances, which is why it is such a good **solvent**. And, **water** is called the "universal **solvent**" because it dissolves more substances than any other liquid. This is important to every living thing on earth. It means that wherever **water** goes, either through the air, the ground, or through our bodies, it takes along valuable chemicals, minerals, and nutrients.

Q.7) How can you explain the process of dissolving?

Ans) A solution is made when one substance called the solute "**dissolves**" into another substance called the solvent. **Dissolving** is when the solute breaks up from a larger crystal of molecules into much smaller groups or individual molecules. This break up is caused by coming into contact with the solvent.

Or we can say,

The stronger the **intermolecular forces** between solute molecule and solvent molecule, the greater the **solubility** of the solute in the solvent.

Q.8) What is the definition of solute and solvent? How can you define a Solution?

Solute and Solvent are the part of the solution where the dissolved matter in any solution or mixture is called as the **solute**, while the liquid or gas that dissolves another liquid, solid or gas is called as the **solvent**. A solution can be **defined** as the homogenous mixture of two or more substances.

Q.9) How salt is made?

Ans) It is naturally **produced** when shallow ponds and bays dry up in the sun and the wind and large **salt** crystals are left behind where the **salty** water once was. When producing sea **salt** on an industrial scale, seawater is placed

in large "concentrating ponds" to allow efficient evaporation from the sun and the wind.

Q.10) What is evaporation of water? Describe the factors affecting evaporation?

Ans) **Evaporation** is the process by which **water** changes from a liquid to gas or vapour. **Evaporation** is the primary pathway that **water** moves from the liquid state back into the **water** cycle as atmospheric **water** vapour.

Following are the factors that affect the evaporation:

- Temperature: As the temperature increases, the rate of **evaporation** also increases. ...
- Surface area: As the surface area increases, the rate of **evaporation** increases. ...
- Humidity: The rate of **evaporation** decreases with an increase in humidity.
- Wind : When **wind** speed and humidity stay constant, and temperature increases, then the rate of **evaporation** will increase because warmer air can hold more water vapor than colder air.