Physics (New Book) - 9th Class Physics English Medium Chapter 7 Preparation

Q1. Define plasma

Ans 1: Plasma: At very high temperature the matter assumes the state of ions and electrons This state is called plasma This state is called plasma This is the fourth state of matter
In plasma gas occurs in its ionic state
Positive ionis and electrons get separated in the presence of electric of magnetic fields in plasma
The neutral particals are also present in plasma
Its temperature is very high

Q2. State Pascal's law.

Ans 1: Pressure applied at any point of a liquid enclosed in a container, is transmitted without loss to all other parts of the liquid e.g. Hydraulic press

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Q3. Difference between stress and strain

Ans 1: Stress: Force acting on unit area at surface of body is called stress. formula: Stress = F/A Unit ; It unit is Nm-2

Ans 2: Strain: The ratio between change in object and origional object is known as strain. when stress acts aon a body, it may change it length, volume or shape. Formula: Strain= change in object/Original object Unit: It has no unit due to ratio between similar quantities.

Q4. Define Young's modulus.

Ans 1: The ration of stress to tensile strain is called Young's modulus. Formula: Young Modulus= Stress/Tensile strain

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Q5. Define density and write down its mathematical form and unit

Ans 1: Density:
Densityof a substance is defined as its mass per unit volume unit of density is kilogram per cubic meter (kgm^{-3})
Density = mass of a substance / volume of that substance

Q6. Write one difference and one Similarity between ships and submarines

Ans 1: Ships: Ships can not travel under water
Ships can sink into the water
Sub marines: Submarines can travel under water
Submarines can not sink in to the water.

Ans 2: Similarity: Ships can travel over water
Ships are designed on the same principle of floatation
Sub marines can travel over water
Submarines are designed on the same principle of floatation

Q7. What is meant by atmospheric ressure

Ans 1: Atmosphere: Earth surrounded by a cover of air called atmosphere

Ans 2: Atmospheric Pressure: Pressure exerted by atmosphere in downward disection is called atmosphere pressure

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Q8. What is hydrometer

Ans 1: Hydrometer is a glass tube with a scale marked on its stem and heavyweight on the bottom It is use to measure density of fluid

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Q9. Write two examples of Applications of Pascal law

Ans 1: Pascal's law find numerous applications in our daily life such as automobiles, hydraulic brake system, hydraulic jack hydraulic press and other hydraulic machines.

Q10. How does vacum cleaner work

Ans 1: The fan in a vacuum cleaner lowers air pressure in its bucket The air from outside enters into it quickly carrying dust particles. In this way dust particles are collected at the bottom of the bucket.