Physics (New Book) - 9th Class Physics English Medium Short Question Preparations

Q1. Define heat capacity of a body

Ans 1: Heat capacity of a body is amount of thermal energy absorbed by it for one Kelvin rise in temperature.

Ans 2: Unit: Its unit is jk

Q2. Why earlier scientists could not guess about the gravitational force?

Ans 1: Earlier scientists could not guess about the gravitational force because the concept of gravitation was first of all given by newton in 1665 earlier and scientist could not guess because there was no concept of gravitation

---

Q3. What is difference between positive acceleration and negative acceleration

Ans 1: Negative acceleration: Acceleration of body is negative if velocity of the body decreases with time The negative acceleration is also called deceleration or retardation.
When moving bodies stops it gives retardation
The direction of negative acceleration is opposite to the direction in which the body in moving.

Ans 2: Positive acceleration of a body is positive if its velocity increases with time.
When velocity of body increases then acceleration is positve.
The direction of positive acceleration is the same in which the body is moving without change in its direction.

Q4. Describe scientific notation? Give an example.

Ans 1: Scientific Notation:
In scientific notation a number is expressed as some power of ten multiplied by a number between 1 and 10. For example, a number 62750 can be expressed as 6.2750×10^4

Q5. What is a satellite

Ans 1: Satellite: An object that revolves around a planted is called a satellite

Ans 2: Example: The Moon revolves around the Earth so moon is a natural satellite of the Earth

---

Q6. How does heat reaches us from the sun

Ans 1: Our sun is the major source of heat energy It reaches us neither by conduction nor by convection because the space between the sun and the Earths atmosphere is travels from one place to another place It is through radiation that heat reaches us from the Sun.

Q7. Define kinematics

Ans 1: Kinematics:
The study of motion of objects without discussing the cause of motion is called kinematics.

Q8. What is meant by principle of moments?

Ans 1: A body is balanced if the sum of clockwise moments acting on the body is equal to the sum of anticlockwise moments acting on its.

Q9. What is digital stopwatch.

Ans 1: Mechanical stopwatch: A mechanical stopwatch can measure a time interval up to minimum 0.1 second
A mechanical stopwatch shows reading through needles
During measuring reading may be a human error in reading
The least count of mechanical stopwatch is 0.1 second

Ans 2: Digital Stopwatch: Digital stopwatch is commonly used in laboratories can measure a time interval as small as second or 0.01
A digital stopwatch shows reading through digits
During measuring reading may not be a human error in reading
The least count of digital stopwatch is 1/100 or 0.01

Q10. Define deforming force

Ans 1: The force which changes the dimension of the object such as length volume or which changes the shape of substance is known as deforming force

---

Q11. Define energy, give two types of mechanical energy.

Ans 1: A body possess energy if it is capable to do work. Unit: Its unit is joule Quantity: It is scalar quantity Types of mechanical energy: i. Kinetic energy ii. Potential energy

---

Q12. Why is the use of zero error necessary in a measuring instrument?

Ans 1: Zero error is necessary in measuring instruments because it helps us to check the instrument we are using wheathercorrect or wrong.

Q13. Write down the formula and unit to find Acceleration.

Ans 1: Formula: Acceleration can be found out by given formula
Acceleration = Change in velocity/time taken

Q14. Why bottoms of cooking pots are made black

Ans 1: The bottoms of cooking pots are made black because the capacity to absorb heat is enhance through it A black or rough surface absorbs more heat as compare to a white or polished surface

Q15. Differentiate between like and unlike forces.

Ans 1: Like parallel forces: such a parallel forces whoe direction is same are called like parallel force. Example: the weights of apples in a sack are parallel to each other and also in the same direction.

Ans 2: Unlike parallel forces.:Such parallel forces which are opposite to each other are called unlike parallel forces. Example: Two forces acting on a steering wheel to turn it are unlike parallel forces.

Q16. What is a vector quantity?

Ans 1: Vector quantity described completely by magnitude and direction . Example: Weight, force, momentum etc.

Q17. Why there is need for 2nd condition of equilibrium if body satisfy 1st condition of equilibrium

Ans 1: If a body satisfied 1st condition of equilibrium then it is not completely in equilibrium. Because there is a chance of producing torque in that body
If two same force are acting on a body in opposite direction in a same line then no rotation is produced but if those two forces act in different lines then the torque is produced so we need another condition for equilibrium to eliminate the torques.

Q18. How solar energy can be converted directly into electricity?

Ans 1: Solar energy can be converted directly into electricity by solar cells.

Q19. What is centre of gravity

Ans 1: Centre of Gravity: A point where whole weight of the body appears to act vertically downward is called centre of gravity of a body e.g centre of gravity of uniform rod is centre of the rod

Q20. When does a force do work? Explain.

Ans 1: When force acts on the body and body covers some distance in the direction of force then we said force do work.