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

Q1. Define significant figures.

Ans 1: In any measurement the accurately known digits and the first doubtful digit ar eknown as significnat figures.

Q2. Explain why the solution of complex problems need interdisciplinary reserach and collaboration.

Ans 1: Complex porblems oftern require interdisciplinary resarch and collaboration because they involve multiple factors and perspectives that cannot be addressed by a single discipline or field of expertise.

Q3. How does the cantact area affect the pressure.

Ans 1: For a certain force, the pressure is very high if the contact area is small.

Q4. How can the stability of ship and bots be improved.

Ans 1: The stability of ships and boats can be improved by lowienr their centre of gravity/ A lower centre of gravity helps the boats or ships resist tipping over, especally in rough watr conditions.

Q5. Think of a body which is at rest but not in equilibrium.

Ans 1: There is not a single body in the universe which is at rest but not in equilibrium.

Q6. Define rigd body.

Ans 1: If the distance between two points of the body remains the same under the action of a force. It is called a rigid body.

Q7. Define Random motion.

Ans 1: If the body moves along an irregular path, the motion is called random motion.
Example:
i) The motion of bee
ii) The motionof gas molecules along a zig-zag path

Q8. What is meant by rigid body

Ans 1: If the distance between two points of the body remains the same under the actionof a force, it is called a rigid boyd. A rigit body is the one that has no deformation by appling force.

Q9. When Sir Isaac Newton was born.

Ans 1: Sir Isacc Newton was born in Lincolnshire on January 4, 1643

Q10. Difference between Temperature and Heat

Ans 1: Temperature:-
Temperature of a body is define das degree of its hotness or coldness
It is denoted by T
its SI unit is Kelven

Ans 2: Heat:
Heat is the form of energy which is tranferred from one object to another due to difference of temperature between the two bodies
Its quantity is denoted by Q
Its unit is Joule

Q11. State Pascal's Law and give daily life.

Ans 1: Defination :- When pressure is applied at one point in an enclosed fluid, it is transmitted equally to all parts of liquid without loss.
Application :-
i. Liquids does not absorb any of the supplied energy
ii. They are capable of moving much heavy loads and prodiging great forces due to incompressibility.
Some useful hydraulic systems are.
1. Hydraulic press
2. Car lift at service stations
3. Hydraulic brakes of vehicles.

Q12. Defien friction

Ans 1: Friction is the force the resists motion when the surface of one object comes in contact, with the surface of another.

Q13. How can uncertainty in small measurements be reduced.

Ans 1: Uncertainty can be redued by taking multiple readings calculatin the average value

Q14. Distinguish between force and pressure.

Ans 1: Force:- An agent which produces or tends to produe motion, stops or tends to stop the motion or deforms or tends to deform an object.
Pressure:- The normal force per unit area is called pressure.
Mathematically: P= F/A

Q15. While driving on a motorway, tyre of a vehicle sometimes bursts, What may be its cause.

Ans 1: Tyre bursts on motorways are often caused by overheating under inflation, tyre wear, road debris, excessive speed, and overloading.

Q16. Express the following into scientific notation.
a) 2574.32 kg
b) 0.45 m
c) 0.004 kg
d) 186000 s

Ans 1: a) 2.57432×10^{3} kg
b) 4.5×10^{-1} m
c) 4.0×10^{-3} kg
d) 1.86×10^{5} s

Q17. What is variable acceleration.

Ans 1: If anyone of the magnitude or direction or both of them chanes it is called variable or mon uniform accelaration.

Q18. How can atmospheric pressure be observed.

Ans 1: Atmospheric pressure can be observed by removing air from closed vessels showing the force exerted by the surrounding air.

Q19. Define line of action of the force.

Ans 1: The line along which the force acts is called the line of action of the force.

Q20. Define Head and Thermodynamcs

Ans 1: It deals with the thermal enery possessed by the materiasl and its used when it flows from one body to another. It may be called as thermal physics.
