

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

Q1. What is the difference between action and reaction

Ans 1: Action: The force exerted by external agency on a system is called action.

Ans 2: Reaction: Response of the system to the force exerted by the external agency is called reaction.

Q2. What is atmospheric pressure? How can we measure the atmospheric pressure?

Ans 1: Atmospheric Pressure:

The earth is surrounded by a cover of air is called atmosphere. It extends to a few hundred kilometers above sea level. Just as certain sea creature live at the bottom of ocean, we live at the bottom of a huge ocean of air. Air is the mixture of gases.

The density of air in the atmosphere is not uniform . It decreases continuously as we go up.

Q3. Define kinetic energy and write tis equation

Ans 1: Kinetic energy: The energy possessed by a body due to its motion is called its kinetic energy

Education $K.E = \frac{1}{2}$

Q4. What is meant by Couple of forces

Ans 1: Couple: A Couple is formed by two unlike parallel forces of the same magnitude but not along the same line.

Ans 2: Example: When a driver turns a vehicle, he applies forces that produce a torque. This torque turns the steering wheel These forces act on opposite sides of the steering wheel are equal in magnitude but opposite in direction. These two forces form a couple

Q5. What is the numerical values of g at Sun and Mars

Ans 1: The value of g on Sun is 274.2

The value of g on mars is 3.73

The value of g on moon is 1.62ms

The value of g on earth is 9.8 ms

Q6. Define torque

Ans 1: Turning effect of a force is called torque or moment of force

Ans 2: Unit: Its unit is newton metre (Nm)

Q7. Write down two causes of thermal pollution.

Ans 1: Global warming is the major causes of thermal pollution. The heat produced by fission reaction causes thermal pollution.

Q8. Which of the following can be obtained from speed-time graph of a body

Ans 1: Initial speed, Final speed. Distance covered,
Using speed time graph of a body we can find all of above quantities as distance covered can be find out by the area under line curve and acceleration can be find out by the slope of line.

Q9. 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 is moving.

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

Q10. Does the weight of an apple increases decreases or remain constant when taken to the top of a mountain

Ans 1: When an apple is taken to the top of mountain its weight decreases because the value of g decreases on mountains

Q11. Define unit of force.

Ans 1: Unit of force is Newton. 1 N is a force that produced an acceleration of 1 ms^{-2} in a body of mass of 1 kg.

Q12. What is meant by Density? What is its SI unit.

Ans 1: Density of substance is defined as the ratio of mass per unit volume. Formula: $D=m/v$

Q13. Describe two situations in which force of friction is needed?

Ans 1: 1-We cannot write if there would be no friction between pen and paper
2- Friction enables us to walk on the ground. we cannot run on a slippery ground. A slippery ground offers very less friction.

Q14. how can we convert 1 ms into kmh

Ans 1: The given speed in ms is multiplied by 3.6 to get speed in kilometer per hour

Q15. Give an example of the renewable energy source.

Ans 1: Sun light and water power are renewable energy source.

Q16. To construct such a working system whose efficiency is 100% is impossible Why

Ans 1: To construct such a working system, whose efficiency is 100% is impossible because every system meets energy losses due to friction that causes heat, noise etc These are not the useful form of energy and go waste.

Q17. Define couple arm

Ans 1: The perpendicular distance between two force of couple is called couple arm

Q18. why do passengers fall outward of the bus when a bus takes a sharp turn

Ans 1: When bus takes a sharp turn the passengers fall in the outward direction it is due to the inertia that they want to continue their motion in a straight line and thus fall outward.

Q19. Write two disadvantages and two disadvantages of friction.

Ans 1: Advantages of friction: It cannot not written if there would be no friction between paper and pencil
Friction enables us to walk on ground We cannot run on a slippery ground because it offers very little friction.

Ans 2: Disadvantages of friction: Friction is undesirable when moving with high speeds because it opposes the motion and thus limits the speed of moving objects
Most of our useful energy is lost as heat and sound due to the friction between various moving parts of machines.

Q20. Define sea breeze how it is cause

Ans 1: On a hot day cold air from the sea begins to move toward the land this is called sea land breeze,

Ans 2: Reason: On a day the temperature of land increase more quickly than the sea It is because the specific heat of land is much smaller as compared to water The air above land gets hot and rises up Cold air from sea begins to move towards land It is called sea breeze
