Physics (New Book) - 9th Class Physics English Medium Chapter 4 Preparation

Q1. Defien rigid 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.

Q2. Define unlike parallel forces.

Ans 1: If parallel forces are acting in opposite direction to one another, they are called unlike parallel force.

Q3. How vector forces can be added.

Ans 1: As forces are vectors, so forecs can also be added by head to tail rule.

Q4. Why are door handles installed far from the hinges.

Ans 1: Door handles are plaed farther from the hinges to increase the moment arm,whci reduces the force needed to produce the requied truning effect for opening or closing the door.

Q5. Why are vehicle made heavy at the bottom.

Ans 1: Vehicles are made heavy at the bottom. This lowers their centre of gravity and helps to increase their stability.

Q6. Write a common application of torque.

Ans 1: Moment of force is applicable in the working of bottle opener.
a small force applied at longer moment arem produces more torque while opening a bottle.

Q7. Define Like paralle forces.

Ans 1: Like Parallel force: If the parallel forces are acting in the same direction these are called like parallel forces.

Q8. Define and explain Centrifugal force.

Ans 1: A force which compels the body to move away from circular path is know as centrigugal force.
Formula:
It is reactio of centripetal force
Formula of centripetal is given below:
f r = mv2 / r

Unit: Unit of centrifugla force is newton N
Ouantity:
I is a vector and derived quantity

Q9. Think of a body whcih is at rest but not is equilibrium.

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

Q10. State unstable equilibrium.

Ans 1: A body is said to be in a state of unstable equilibrium.if after a slight title it tends to move on further away from its original position.
