

Physics (New Book) - 9th Class Physics English Medium Chapter 6 Preparation

Q1. What does the slope of the force extension graph represent.

Ans 1: the slope of the force-extension graph represents the spring constant.

Q2. Distinguish between force and pressure.

Ans 1: Force:- An agent which produces or tends to produce 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: $P = F/A$

Q3. Why animals like deer who run fast have a small area of the foot.

Ans 1: Deer have small feet to run faster by reduce air friction with ground. This helps the deer escape predation easily.

Q4. Define deforming force

Ans 1: A force that changes the size or shape of an object is called a deforming force.

Q5. How does the contact area affect the pressure.

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

Q6. 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.

Q7. How does the long neck is not a problem to a giraffe while raising its neck suddenly.

Ans 1: The long neck of giraffe is not a problem when raised suddenly due to a special valve called the rete mirabile which regulates blood pressure and flow to the brain.

Q8. The end of glass tube used in a simple barometer is not properly sealed. Some leak is present what will be its effect.

Ans 1: It causes the reading lower than actual atmospheric pressure.

Q9. What Units are used to measure atmospheric pressure.

Ans 1: Atmospheric pressure is commonly measured in Pascal (Pa), atmospheric (atm) and millibar (mb)

Q10. What happens if a material is deformed beyond its elastic limit.

Ans 1: The material undergoes a permanent change in shape or size and does not return to its original shape even after the deforming force is removed.
