

Physics - 10th Class Physics English Medium Short Question Preparations

Q1. Define mutual induction?

Ans 1: The phenomenon of production of induced current in one coil due to change of current in a neighboring coil is called mutual induction.

Q2. Define volt.

Ans 1: If the potential energy of one coulomb of charge at a point in the electric field is one joule, the potential of that point will be one volt.

Q3. What is meant by Boolean algebra?

Ans 1: It is a branch of mathematics which deals with the relationships of logic variables.

Q4. Why ultrasound is useful in medical field?

Ans 1: Ultrasonic waves carry more energy and short wavelength therefore ultrasonic waves are used to diagnose and treat different ailments.

Q5. What is Natural radioactivity.

Ans 1: In natural radioactivity a naturally unstable element spontaneously emits radiation to become stable.

Ans 2: Artificial Radioactivity: In artificial radioactivity stable elements are bombarded with protons, neutrons or alpha particles to make them radioactive, such process of radioactivity is called artificial radioactivity.

Q6. Define kilowatt hour.

Ans 1: The amount of energy delivered by power of one kilowatt in one hour is called kilowatt hour.
 $1 \text{ kilowatt} = 3.6 \text{ MJ}$

Q7. Why does not diamond conduct electricity?

Ans 1: Diamond does not conduct electricity. Because it has no free electrons.

Q8. What is Gamma radiations.

Ans 1: the gamma rays can penetrate to a considerable thickness of concrete. It is due to their large speed and neutral nature.

Q9. What is the principle of walk-through metal detectors.

Ans 1: Walk through metal detectors are installed at air ports and other places for security purpose. These detectors detect metal weapons etc. Using the principle of electromagnetic induction.

Q10. Define coulomb?

Ans 1: If one ampere current flow from a wire in one second then its charge will be one coulomb.
