

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

Q1. Comment on the statement A theory is capable of being proved right but not being proved wrong is not a scientific theory.

Ans 1: A scientific theory must be falsifiable, meaning it can be proven wrong through experimentation or observation. If a theory cannot be proven wrong, it is not considered a scientific theory.

Q2. List The main steps of scientific method.

Ans 1: The main steps of the scientific method are observation, question, hypothesis, prediction, experiment, analysis, conclusion and communication.

Q3. What is the basis of laser technology.

Ans 1: Laser technology is based on the principles of atomic physics. It is widely used in medical diagnosis and treatment, metallurgy, industry, telecommunication and space exploration. It is also used extensively for military purposes.

Q4. What is meant by interdisciplinary field of physics.

Ans 1: It refers to integration and interaction of Physics with various other fields of study physics being fundamental science, provides essential principles, techniques and methods that are applicable across a wide range of disciplines.

Q5. Define Heat and Thermodynamics

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

Q6. Explain why the solution of complex problems need interdisciplinary research and collaboration.

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

Q7. What is different between geophysics and climate physics.

Ans 1: Geophysics: It applies physical principles to the study of internal structure of the Earth, its magnetic and gravitational fields, seismic activity and volcanoes. etc.

Climate physics: It includes the study of physical processes in the environment, including atmospheric dynamics, climate changes and weather conditions.

