

## **WEEK 6**

### **NATURE OF SCIENCE**

The core issues discussed are:

**Science** is the cumulative body of systematized knowledge obtained through observation, experiment and reasoning. Science advances as scientists accumulate more detailed facts and gain a better understanding of these fundamental principles and laws. A theory developed by a scientist cannot be accepted as part of scientific knowledge until it has been verified by the studies of other researchers. Scientific progress depends on new ideas expanding and replacing old ones.

#### **Importance of science:**

1. Science provides the basis of much of modern technology – the tools, machines, techniques, and sources of power that make our lives and work easier.
2. Discoveries of scientists help to shape our views about ourselves and our place in the universe.
3. Scientific and technological inventions such as computers, automobiles, airplanes, television, communication satellites, have transformed human life.

**Please note** that applied knowledge is very vital for this topic.

Test questions:

1. What are the qualities that make science what it is?
2. What is its essence?
3. What differentiates science from other intellectual matters?
5. How do we distinguish between genuine research and pseudo research?
6. What is the importance of science?
7. To what extent have scientific discoveries help to shape our views about ourselves and our place in the universe?