**4.2. Anticipated outcomes of Teaching Natural Science – Developing Scientific Literacy**

**Scientific Literacy**

In order to develop thorough understanding among the students, a science teacher should not only have adequate understanding of science, but also be familiar with the process of science. To achieve this we should develop scientific literacy.

“Scientific Literacy” means literacy in a scientific way ie, awareness in science. It means a firm understanding of the nature of science and its inter relationship with technology and society. In other words, “Scientific literacy is the knowledge and understanding of the scientific concepts and processes required for personal decision – making, participation in civic and cultural affairs and economic productivity”. (National Academy of Sciences, 1995). It is one of the major aims of teaching science. Scientific literacy enables people to use scientific principles and participate in discussion of scientific issues that affect society.

Scientific literacy implies three major ideas or aspects:-

1. To understand one’s environment.
2. To know about the process by which understanding is gained. (Scientific enquiry)
3. To develop the spirit of science.

**Characteristics of a Person Possessing Scientific Literacy**

* A good science background knowledge of related facts concepts, theories etc. with the ability to apply them.
* A clear understanding of the ever-changing nature of science.
* A positive attitude towards science and technology.
* Ability to make value judgement and decisions on issues related to science based on societal needs.
* Ability to use scientific method to solve problems related to biological phenomena and to make decisions appropriate to day-today life.
* Sufficient process skills in science, which would enable a person to function in a better manner as a citizen.
* An appreciation of the values of science and technology and their effects in society.
* A better understanding of the world around us.

A person possessing these attributes can be considered as scientifically literate.