Questions:  
Q: From which language is the word science derived?  
A: The word science is derived from the Latin word ‘Scientia’.

Q: What does the word ‘Scientia’ mean?  
A: ‘Scientia’ means knowledge.

Q: How does science pursue knowledge and understanding of the natural and social world?  
A: By following a systematic methodology based on evidences.

Q: What does empirical evidence refer to?  
A: Acquiring information through direct observation or experiments.

Q: On what is scientific knowledge based?  
A: Scientific knowledge is based on verifiable evidence.

Q: What does objectivity mean in science?  
A: The ability to see and accept the facts as they are and not as the investigator might wish them to be.

Q: What should be set aside while investigating a particular phenomenon?  
A: Biases, prejudices, beliefs, wishes, values, preferences, etc.

Q: What does science aim to find through scientific causality?  
A: The cause-effect relationship between variables under consideration.

Q: What does a researcher try to control in a scientific study?  
A: All extraneous variables.

Q: What procedure does science adopt for studying a phenomenon?  
A: A certain sequential procedure.

Q: What steps are included in the sequential procedure?  
A: Identifying the problem, formulation of hypothesis, collection of facts, analysis of facts, scientific generalization and prediction.

Q: What does replication mean in science?  
A: Reproducibility of scientific knowledge under the same circumstances stated anywhere and anytime.

Q: What does replication assure?  
A: Replication assures the reliability of results.

Q: What is predictability in science?  
A: Predictability is an important feature of science.

Q: What do scientists attempt to do besides describing phenomena?  
A: They attempt to explain it and make predictions accordingly.