



Chapter 1

Introduction to Chemistry



Introduction to Chemistry

Give Reasons

Question 1.

Alchemy was considered a pseudoscience.

Answer: Towards the end of the 17th Century the scientific processes involving modern Chemistry started paving paths and Alchemy today is considered a pseudoscience and Chemistry regains its rightful position as a serious scientific field.

Question 2.

Preservatives are added to food or beverages.

Answer: Preservatives are added to food or beverages because of following reasons :

1. Prevent decomposition by bacteria or microbes.
2. Reduce risk of food borne infections.
3. Preserve nutritional quality of food.

Question 3.

Titanium dioxide is an important ingredient in cosmetics.

Answer: It is a natural pigment powder which provides a base for mineral makeup. It provides mild sun protection and as a pigment gives a white colouration to coloured ingredients.

Question 4.

Aspirin is one of the most widely used medications – globally.

Answer: Aspirin is one of the most widely used medications – globally because of following reasons:

1. It is a medicine to treat pain, fever & inflammation.
2. Aspirin given shortly after a heart attack may decrease risk of death.
3. As long term use it may reduce, blood clots in people who are at a high risk.



Question 5.

Ordinary soap is wasted in hard water.

Answer: Ordinary soap is wasted in hard water because hard water is one which does not lather with soap.

Question 6.

A philosopher's stone is not exactly a stone.

Answer: Philosopher's stone is a legendary substance, capable of turning inexpensive metals like lead or mercury into – gold and silver. (It was not literally a stone, but a powder or potion).

Question 7.

Food processing is an important procedure for obtaining marketable food products.

Answer: Food processing – involves physical or chemical processes, to transform or change the raw ingredients in food into easy usable forms of food available in markets. Raw materials in food to Marketable food products

Food Processing processes

1. Mincing Cooking Pickling
2. Preservative addition Canning Packaging

Question 8.

Cosmetics may contain preservatives, as one of their ingredients.

Answer: They extend the shelf life of a cosmetic and may prevent growth of microorganisms.

Question 9.

Polyester is added to natural fibre cotton, to give terylene.

Answer: Polyester is added to natural fibre cotton, to give terylene because this combination makes the fabric easy to clean and crease resistant.

Question 10

All medicines must be taken under proper doctor's supervision and in the correct dose.

Answer: All medicines must be taken under proper doctor's supervision and in the correct dose because some medicine has side effect as aspirin not taken in proper dose may cause stomach ulcers similarly paracetamol if taken in high dose may cause liver problems.

