Class 6 Chemistry Answersheet Ch -1 :Introduction to Chemistry

I. Give one word answer:

1.Biochemistry 2.beaker 3.boiling tube 4.chemist 5.law

II.Fill in the blanks:

1.knowledge 2.alchemists 3.burette, pipette 4.water 5.taste, vapour

III. Match the following:

1-b, 2-a, 3-d, 4-e, 5-c

IV. Test tube- it is used to perform chemical tests.

Beaker – it is used for storing and mixing liquids.

Burner – it is used for heating purposes.

Funnel – it is used in filtration and for transferring liquids to containers

Gas jar - it is used to collect and store gases.

V. Answer the following:

1. Science is the broad field of human knowledge concerned with facts that are explained logically by rules, patterns or principles.

Chemistry is the study of substances, their properties, structures and transformations.

Physical Chemistry studies how physical properties, such as heat and pressure, affect chemical reactions.

Bio Chemistry studies the chemical make up and behaviour in living things.

2. Five laboratory apparatuses are test tube, beaker, burner, funnel, gas jar.

- 3. Five essential things that use various chemical compounds are fertilizers, antibiotics, building material, insecticides, pesticides.
- 4. Steps followed in scientific method:
- i) identifying the problem.
- ii) gathering all the known information.
- iii) forming a hypothesis on the basis of experimental facts.
- iv) verification by other scientists and formation of theory.
- v) universal acceptance in the form of law.
- 5. 5 precautions to be taken in a chemistry laboratory:
- i) never taste a chemical or inhale its vapours.
- ii) never add water into a concentrated acid.
- iii) keep inflammable chemicals away from the burner.
- iv) while heating the contents of a test tube be sure to keep the open end of the tube away from yourself
- v) always wash your hands just before leaving the laboratory.
- VI. End of the chapter exercises:
- 1. Page 14
- I. Fill in the blanks:
- 1. Knowledge 2. Gold 3. Alchemists 4.Biochemistry 5. Technology
- II. Match the following:

1-d. 2-a 3-e 4-b 5-c

- III. Give one word for the following:
- 1. scientific method 2. law 3. Alchemist 4.experimental 5. biology

Page 19

- I. Name the following:
- 1. measuring cylinder 2. test tube 3 mortar and pestle
- II. Give one word for the following:
- 1. funnel 2. porcelain 3. gas jar 4. Burner 5 mortar

III. Fill in the blanks:

1. Graduated 2. boiling tube 3. Porcelain 4. water 5. Inflammable.

Page 21

A. Tick the correct answer:

1b 2b 3c 4a 5d

- B. Fill in the blanks:
- 1. Knowledge 2. gas 3. law 4 .systematic steps 5.porcelain
- C. True or false. Correct the false statements:
- 1. True 2. true 3. false bunsen burner is used for heating purposes. 4. False. Observations are very important in Chemistry. 5.true

Page 22

- D. Find the odd one out giving reason:
- 1. Spirit lamp. It is used for heating while the others are used to measure and store liquids.
- 2. Carbon dioxide. It is a gas while the others are antibiotics.
- 3. Examination. The others are related to experiments.
- 4. Glass rod. It is used to stir and mix chemicals while the others are used for heating.
- 5. Physics. It is a different branch of science while the others are related to chemistry.
- E. Match the columns:

1d 2a 3e 4b 5c

F. Give reasons:

- 1. Practicals are very important in Chemistry because it is an experimental science and involves various types of observations and transformations in substances.
- 2. Chemistry is essential for human life because the progress in modern society is based on advances in chemistry. Some of the most essential needs for the living of humans require the use of various chemical compounds.

- 3. Dishes used for evaporating substances are made of porcelain because it can absorb a large amount of heat without breaking.
- 4. Test tubes are made of glass because any change in colour or formation of new substances or evolution of gases can be observed clearly during an experiment.

G. Define the following:

- 1. Science is the term for the broad field of human knowledge concerned with facts that are explained logically by rules, patterns or principles.
- 2. Hypothesis is a possible explanation for an event that has been observed.
- 3. Scientific method is a systematic step by step method of solving problems.
- 4. Mortar and pestle is an apparatus made of porcelain which is used to grind solid substances into powder.
- 5. Bunsen burner is a burner which uses gas as a fuel to produce the flame and is used for heating purposes.

H. Answer the following:

- 1. The progress in modern society is based on advances in chemistry. Some of the most essential things needed by humans require the use of various chemical compounds.
- 2. We use a wire gauze when a glass apparatus is heated because it ensures uniform distribution of heat.
- 3.A test tube is a cylindrical vessel closed at one end which is used to perform chemical test.

A hard glass tube is a cylindrical test tube slightly bigger than a normal test tube and it is made of hard glass. It is used for heating substances at high temperature.

- 4.(a) A funnel is a cone shaped wide glass vessel drawn into a narrow neck. It is used in filtration and for transferring liquids to containers without spilling.
- (b) A gas jar is a cylindrical vessel made of hard glass and has a lid. It is used to collect and store gases.
