

Date- 25/09/24

**St. Thomas' School, Sunari, Agra**  
**Half yearly Specimen Question paper (2024-25)**

**Class: VI**

**Subject: Chemistry**

**M. Time: 2 Hour**

**M. Marks: 80**

**Name:** \_\_\_\_\_

**Roll no.** \_\_\_\_\_

**General Instructions:**

- Read all the questions carefully before answering.
- All the questions are compulsory.
- Don't copy questions in answer script. Pay attention to the correct numbering of answers.
- Maintain good handwriting and pay attention to the margins & neatness.

**Question 1 Choose & write the correct option:**

**[5]**

- (i) Taj Mahal is made of marble, which is chemically called \_\_\_\_\_.
- a) Calcium hydrogen carbonate                      c) Calcium bicarbonate  
b) Calcium carbonate                                      d) Calcium chloride
- (ii) \_\_\_\_\_ is used in making jewellery, for cutting and grinding glass.
- a) Sulphur    c) Diamond  
b) Hydrogen    d) Graphite
- (iii) \_\_\_\_\_ is a chemical change which is irreversible, desirable and exothermic.
- a) Respiration    c) Ingestion  
b) Fermentation    d) Assimilation
- (iv) What are the substances that participate in a chemical reaction called?
- a) Products    c) Reactants  
b) Catalysts    d) metalloids
- (v) \_\_\_\_\_ is a natural biochemical process occurring inside living things.
- a) Combustion    c) Corrosion  
b) Rusting    d) Respiration

**Question 2 Complete the following sentences.**

**[5]**

- (i) \_\_\_\_\_ gas is present in aerated drinks.
- (ii) Iron gets rusted due to the action of oxygen and \_\_\_\_\_ on it.
- (iii) Ripening of fruits is a(n) \_\_\_\_\_ change.
- (iv) The \_\_\_\_\_ in the word equation shows the direction of the chemical reaction.
- (v) A change in which energy \_\_\_\_\_ is called an endothermic reaction.

**Question 3 Correct the following false statements by writing the correct statements, if there is no correction write 'no correction'.**

**[5]**

- (i) Graphite is a metalloid.
- (ii) Oxygen is a good conductor of heat and electricity.

- (iii) Reaction of nitrogen and hydrogen form Nitric acid.
- (iv) Photosynthesis is an exothermic chemical change.
- (v) Using public transport and walking can help to reduce water pollution

**Question 4. Write the name of the compounds of the following formulae.**

**[5]**

- i.  $\text{PCl}_5$
- ii.  $\text{Ba}(\text{OH})_2$
- iii.  $\text{K}_2\text{Cr}_2\text{O}_7$
- iv.  $(\text{NH}_4)_2\text{SO}_4$
- v.  $\text{Na}_2\text{HPO}_4$

**Question 5. Answer in one or two words.**

**[5]**

- (i) A short hand notation of a chemical reaction using the names of the reactants and products.
- (ii) A purple color non-metal.
- (iii) A noble gas which is used in the treatment of cancer.
- (iv) A solid which sublimes easily.
- (v) A catalyst used in the decomposition of potassium chlorate.

**Question 6. Write the symbols and latin names of the following elements.**

**[4]**

- i. Tungsten
- ii. Antimony
- iii. Mercury
- iv. Neon

**Question 7 Give two examples of each of the following.**

**[4]**

- (i) Ductile metals
- (ii) Air pollutants
- (iii) Undesirable change
- (iv) Gaseous non-metals

**Question 8 Define the following terms.**

**[4]**

- (i) Metalloid
- (ii) Combustion
- (iii) Acid rain
- (iv) Galvanization

**Question 9. Name the separating technique that is best suited to separate the following types of mixtures.**

**(4)**

- i. Solid - Solid
- ii. Solid - liquid
- iii. Liquid - Gas
- iv. Liquid – Solid

**Question 10. Derive the formulae of the following compounds.**

**(4)**

- i. Sodium nitrate
- ii. Sodium perborate
- iii. Trichloromethane
- iv. Dinitrogen monoxide

**Question 11. Distinguish between the following.**

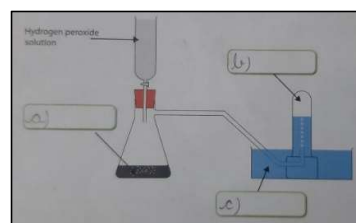
**[6]**

- (i) Malleability and Ductility
- (ii) Combustion and Respiration

**Question 12. Diagram based question.**

**[4]**

- (i) Label a, b and c and write the name of the experiment shown.
- (ii) Is there any gas released? If yes, name it.
- (iii) Name the catalyst involved in the experiment.
- (iv) Write the word equation involved



**Question 13. Short answer questions.**

**[10]**

- (i) What does effervescence in a chemical reaction show? Write an example of a chemical reaction in which effervescence occurs.
- (ii) State any two uses of each of the following elements:
  - a) Chlorine
  - b) Silicon
- (iii) What are allotropes?
- (iv) When sulphur is heated in a test tube, its color and state of matter changes. Is this considered a physical or a chemical change? Why?
- (v) Write the name of the different constituents of the following alloys:
  - a) Stainless steel
  - b) Bronze

**Question 14. Long answer questions.**

**[15]**

- (i) What are the conditions necessary for a chemical reaction to take place?
- (ii) State any three ways by which we can conserve energy and help reduce air pollution.
- (iii) Explain any three methods to prevent rusting?
- (iv) Write any three properties of chemical change.
- (v) How can oxygen be manufactured from air?

**Note:**

This specimen paper is provided as an example of the format and type of questions that may appear on the half yearly exam (2024-25). It is intended to help students familiarize themselves with the structure and expectations of the exam

