

ST. THOMAS' SCHOOL, SUNARI, AGRA
Specimen Question Paper (2024-25)
Class- VII
Subject- Chemistry

Time allowed - 2 Hours

Maximum marks – 80

Name: _____

Sec: _____

Roll no. _____

General Instructions:

- Answer to this paper must be written on the paper provided separately.
- You will not be allowed to write during first 15 minutes.
- This time to be spent in reading the question paper.
- The time given at the head of this question paper is the time allowed for writing the answers.
- 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.
- The intended marks for questions or part of questions are given in the brackets [].

Question 1. Choose & write the correct answer:

[5]

- (i) Which of the following is not a chemical change characteristic?
(a) change in colour (c) change in odour
(b) change in state (d) evolution of gas
- (ii) Which of the following metals have low density?
(a) lead (c) sodium
(b) iron (d) mercury
- (iii) Which is the natural way of adding oxygen to air which involves green plants?
(a) respiration (c) dissolution
(b) burning (d) photosynthesis
- (iv) Which of the following is not the method to prevent from rusting?
(a) greasing (c) painting
(b) precipitation (d) galvanization
- (v) Name the substance which undergoes chemical change.
(a) reactant (c) chemical reaction
(b) product (d) valency

Question 2. Complete the following sentences:

[5]

- (i) _____ is the hardest known substance on the earth's crust.
(ii) _____ gets rusted due to the action of oxygen and moisture on it.
(iii) _____ gas is used in fire extinguishers.
(iv) A substance that alters the rate of a chemical reaction is called a _____.
(v) The process by which food is broken down into simpler forms is called _____.

Question 3. Correct the following false statements by writing the correct statement.

[5]

- (i) A chemical reaction is one in which no new substance is formed.
(ii) Car exhausts have converters which increase air pollution.
(iii) A partial lunar eclipse occurs when the moon is totally hidden by earth.
(iv) Fulcrum is the object that need to be moved or lifted.
(v) Wheel and axle is second class lever.

Question 4. Match the items given in Column A with a most appropriate ones in Column B and rewrite the correct matching pairs: [5]

COLUMN A		COLUMN B	
(i)	Helium	1.	Chemical change
(ii)	Digestion of food	2.	Filling light bulbs
(iii)	Sulphur dioxide	3.	78 %
(iv)	Oxygen	4.	Weather balloons
(v)	Argon	5.	Causes acid rain

Question 5. Answer in one or two words. [5]

- (i) A catalyst used in the decomposition of potassium chlorate.
- (ii) A short hand notation of a chemical reaction using the names of the reactants and products.
- (iii) A purple colour non-metal.
- (iv) A noble gas which is used in the treatment of cancer.
- (v) A metalloid used as a semi-conductor in electronic devices.

Question 6. Write the name of the compounds of the following formulae: [4]

- (i) H_2O_2
- (ii) MnO_2
- (iii) C_2H_6
- (iv) C_6H_6

Question 7. Write the symbols and Latin names of the following elements: [3]

- (i) Germanium
- (ii) Caesium
- (iii) Molybedum
- (iv) Scandium

Question 8. Give two examples of each of the following: [3]

- (i) Physical change
- (ii) Metals
- (iii) Metalloid

Question 9. Define the following terms: [3]

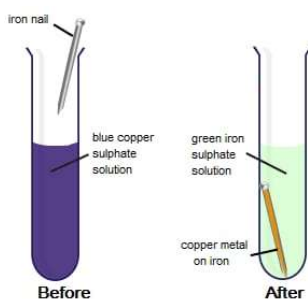
- (i) Acid rain
- (ii) Galvanization
- (iii) Chemical change

Question 10. Name the separating technique that is best suited to separate the following types of mixtures. [3]

- (i) Husk from grains
- (ii) Tea from tea leaves
- (iii) Magnet from junkyards

Question 11. Derive the formulae of the following compounds. [3]

- (i) Ethanol
- (ii) Isopropanol
- (iii) Formic acid

Question 12. Diagram based question:**[4]**

- (i) Which process is depicted in the given figure?
- (ii) Will there be any change in the colour of the solutions? If yes, why?
- (iii) Write the word equation involved in the experiment.
- (iv) What happens when an iron nail is dipped in copper sulphate solution?

Question 13. HOTS questions**[4]**

- (i) Can compounds react with each other in a solid state? What is done to make them react? Discuss.
- (ii) Silicon is used in making microchips for computers and other electronic devices. Why is it chosen over metals such as copper?
- (iii) The Mathura refinery is situated about 50 km away from the Taj Mahal. How is it affecting the famous monument?
- (iv) Smoke precipitators are installed in the chimneys of factories. What is their role?

Question 14. Distinguish between the following: (Write two points.)**[6]**

- (i) Malleability and Ductility
- (ii) Reactant and product
- (iii) Physical and chemical change

Question 15. Short answer questions:**[10]**

- (i) State any two uses of each of the following elements:
 - (a) Chlorine
 - (b) Silicon
- (ii) Mention the harmful effects caused by the following air pollutants:
 - (a) Chlorofluorocarbons
 - (b) Carbon monoxide
- (iii) What does effervescence in a chemical reaction show? Write an example of a chemical reaction in which effervescence occurs.
- (iv) Mention any two examples of the following changes:
 - (a) Undesirable change
 - (b) Reversible change
- (v) How is oxygen prepared from water?

Question 16. Long answer questions:**[12]**

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