Sample Paper SET-II
Subject: CHEMISTRY (science paper-2)

Class: 8

Time Duration: 2hours. Maximum marks: 80

General Instructions:
Answers to this page must be written on the paper provided separately.
You will not be allowed to write during first 15 minutes.
This time is to be spent in reading the Question paper.
The time given at the head of this paper is the time allowed for writing the answers.
Attempt all question from section-I and any four question from section-II.
The intended marks for questions or parts of questions are given in brackets [ ].

SECTION – I (40 Marks)
Attempt all questions from this section.

I. Name the following. [5]
1. Name the metal which is used in converting vegetable oils to vegetable ghee?
2. Name the scientist who proposed the atomic theory of matter?
3. Name the substance which is used for recovering metals from their oxides?
4. Name the scientist who discovered the hydrogen gas?
5. Name the metal which is used for making photographic films?

II. State whether the following statements are true or false. If false, rewrite the statement. [5]
1. The maximum temperature of oxy-hydrogen flame is of 28000°c. ( )
2. The reaction between HCl and NH₃ gas is chemical composition. ( )
3. Tin is used for making bronze. ( )
4. Carbon monoxide is present in the traces of tobacco smoke. ( )
5. K shell of any atom can accommodate a maximum of ten electrons. ( )

III. Balance the given chemical reaction. [5]
1. Fe S + 7O₂ → 2 Fe O₃ + 4SO₂.
2. Caco₃ → CaO + CO
3. Pb S + 3O₂ → 2 PbO + 2SO₂.
4. Fe₂O₃ + 3CO → Fe + CO₂.
5. Al₂O₃ → 4Al + 3O₂

IV. Fill in the blanks. [5]
1. ___________ are used for cutting and polishing diamonds.
2. Graphite is a _________ of heat and _________ of electricity.
3. A geometric representation of oxygen atom is ___________.
4. Wood charcoal is an excellent ________________ agent.
5. A chemical reaction proceeds with the release of heat energy is ________.
V. Solve the following numerical problems. [5]

1. Calculate the weight of calcium oxide formed when 25gm of lime stone is heated strongly. 
   \[ \text{Ca} = 40, \text{C} = 12, \text{O} = 16 \].

2. Calculate the weight of aluminum required when 8 gm of sulphur completely reacts with aluminum to form aluminum sulphide. 
   \[ \text{Al} = 27, \text{S} = 32 \].

VI. Multiple choice questions. [5]

1. Which of the following process is involved in converting sulphide ore into an oxide ore?
   a) Calcination.
   b) Heating.
   c) Roasting.
   d) Electrolysis.

2. The process of removing oxygen from the compounds containing oxygen is called as ________________.
   a) Displacement.
   b) Synthesis.
   c) Oxidation.
   d) Reduction.

3. Which of the following non metals are used for making solar cells?
   a) Phosphorus.
   b) Silicon.
   c) Sulphur.
   d) Boron.

4. Which of the following atomic particles has positive charge on it?
   a) Neutrons.
   b) Electrons.
   c) Protons.
   d) All of the above.

5. Which of the following is the cheapest, convenient and harmless fuel?
   a) LPG.
   b) Crude oil.
   c) Kerosene.
   d) Biogas.
VII. Define the following terms. [5]

1. Isotopes.
2. Fractional; distillation.
4. Chemical reactions.
5. Atomic number.

VIII. Match the items in column A with those in column B. [5]

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Common salt.</td>
<td>1. C₆H₁₂O₆</td>
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<tr>
<td>2. Biochemical catalysts.</td>
<td>2. Youngest variety of coal.</td>
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<tr>
<td>5. Gasoline.</td>
<td>5. A homogeneous mixture.</td>
</tr>
<tr>
<td>8. Alloy.</td>
<td>8. C₁₂H₂₆</td>
</tr>
<tr>
<td>10. Anions.</td>
<td>10. Pale yellow powder.</td>
</tr>
</tbody>
</table>

SECTION – II (40 Marks)

Attempt any 4 questions from this section.

1. Explain in detail how are the diamonds formed in nature? [10]
2. List out any 4 physical properties 4 uses of graphite? [10]
3. Explain in detail about oxidation and reduction with an example for each? [10]
4. Explain in detail about Dalton’s atomic theory of matter?[10]
5. What is LPG? Write few advantages of using LPG as a domestic fuel?[10]
6. Prove with an experiment that water acts as a reducing agent in converting metal oxides into its metals? [10]