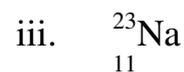
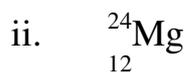
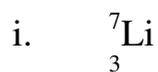


d. Draw the orbital diagrams of the following atoms. (3)



e. Give chemical name and formula of the following. (4)

i. Slaked lime

ii. Baking soda

f. State one method by which. (2)

i. Oxygen is added to air.

ii. Nitrogen is removed from the air.

g. Fill in the boxes and rewrite the table. (6)

Sr. No.	Element / Ion	Atomic number	Mass number	Protons	Electrons	Neutrons
i.	${}^{32}_{16}\text{S}^{-2}$	<input type="text"/>	-	-	<input type="text"/>	-
ii.	${}^{39}_{19}\text{K}$	-	<input type="text"/>	-	-	<input type="text"/>
iii.	${}^{19}_9\text{F}$	<input type="text"/>	-	<input type="text"/>	-	-

SECTION – B (30 MARKS)

Attempt any 3 questions from this section.

Q. 2 a. Name the following. (4)

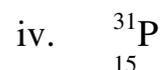
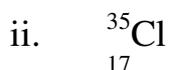
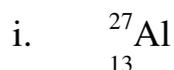
i. A gas used for welding and cutting of metals.

ii. Solid form of carbon dioxide.

iii. An alkali used in manufacture of soap.

iv. A gas used in ordinary electric bulb.

b. State the electronic configuration of the following elements. (4)



c. State the properties of oxygen with respect to. (2)

i. Nature

ii. Action on litmus

Q. 3 a. Fill in the blanks. (4)

Sr. No.	Type of Salt	Name of the Salt	Formula	Base Source
i.	Nitrite	_____	NH_4NO_2	_____
ii.	Acetate	Sodium acetate	_____	_____

- b. State the valency of the following radicals along with their symbols. (4)
- | | |
|-----------------|---------------|
| i. Magnesium | ii. Auric |
| iii. Bisulphate | iv. Carbonate |
- c. Explain the use of sodium carbonate. (2)
- | | |
|---------------|------------------------------|
| i. In laundry | ii. In the chemical industry |
|---------------|------------------------------|

- Q. 4** a. Write the molecular formula for the following. (5)
- | | |
|-------------------------|------------------------|
| i. Hydrogen peroxide | ii. Aluminium nitride |
| iii. Silver sulphide | iv. Potassium chlorate |
| v. Carbon tetrachloride | |

- b. What you would observe when. (3)
- Carbon dioxide gas is bubble through limewater.
 - A drop of is added to sodium hydroxide solution.
 - Blue litmus paper is introduced in a solution of hydrochloric acid.
- c. Give one example of each. (2)
- | | |
|--------------|-------------------|
| i. Weak base | ii. Neutral oxide |
|--------------|-------------------|

- Q. 5** a. Identify the type of chemical reactions. (4)
- | | | | |
|------|---|-------------------|---|
| i. | $2\text{Mg} + \text{O}_2$ | \longrightarrow | 2MgO |
| ii. | $\text{Fe} + \text{CuSO}_4$ | \longrightarrow | $\text{FeSO}_4 + \text{Cu}$ |
| iii. | $\text{AgNO}_3 + \text{NaCl}$ | \longrightarrow | $\text{AgCl} + \text{NaNO}_3$ |
| iv. | $(\text{NH}_4)_2 \text{Cr}_2\text{O}_7$ | \longrightarrow | $\text{Cr}_2\text{O}_3 + \text{N}_2 \uparrow + 4\text{H}_2\text{O}$ |

- b. Give reasons. (2)
- Sodium chloride is a constituent of freezing mixtures.
 - Acetic acid is a monobasic acid.
- c. Name the acid present in the following. (4)
- | | |
|--------------------|-------------------|
| i. Vinegar | ii. Sting of ants |
| iii. Aerated drink | iv. Sour milk |