

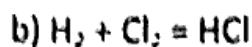
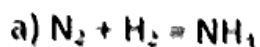
Half Yearly Examination (2023-24)

Subject : Chemistry

Class : VIII

M.M. 50

Q.1 : Balance the given chemical equation:



Q.2 : Fill in the blanks:

a) A gas is compressed easily because of its ..... intermolecular space.

b) The mass of the cathode-ray particles is.....

c) Nitrogen is ..... in  $AlN$ .

d) The intermolecular space in a substance ..... with increasing intermolecular force.

e) Atomic number of Aluminum is .....

Q.3 : Give Reasons:

a) Why are atoms electrically neutral?

b) Why does solid melt on heating?

Q.4 : True or False :

a) The collision among the particles in a liquid causes it to evaporate. [     ]

b) Anode rays are a stream of protons. [     ]

c) A noble-gas element is monoatomic as well as monovalent. [     ]

d) Burning does not obey the law of conservation of mass. [     ]

e) Ozone is a triatomic gas. [     ]

Q.5 : Answer the following questions:

a) Name the particle that constitutes cathode rays.

b) From which language and word the symbol of Sodium and Copper has been derived?

c) State the law of conservation of Mass.

d) Who discovered the nucleus?

e) Explain the evaporation of liquid on the basis of Kinetic theory.

**Q. 6 : Find the number of Electrons, Protons and Neutron in a nitrogen atom. (Z=7)**

**Q.7 : Choose the correct options:**

a) Which of the following symbols I derived from the Latin name of the element:

- i) He [ ]      ii) Mg [ ]      iii) Ne [ ]      iv) Ag [ ]

b) Who discovered Neutrons?

- i) Sir J.J Thomson [ ]      ii) E. Goldstein [ ]  
 iii) Ernest Rutherford [ ]      iv) James Chadwick [ ]

c) Energy possessed by the particles due to motion is:

- i) Heat Energy [ ]      ii) Kinetic Energy [ ]  
 iii) Potential Energy [ ]      iv) Pressure [ ]

d) Which of the following is Monoatomic element:

- i) He [ ]      ii) O<sub>2</sub> [ ]      iii) Cl<sub>2</sub> [ ]      iv) P<sub>4</sub> [ ]

e) The atom of which of the following elements has only one proton.

- i) Hydrogen [ ]      ii) Helium [ ]      iii) Sodium [ ]      iv) Neon [ ]

**Q.8 : Long Answers Question: (Any two of these)**

- a) Explain how cathode rays and anode rays are produced in a discharge tube.  
 b) Describe an experiment which proves the law of conservation of mass.  
 c) Draw Neils Bohr Atomic model.

