

LITTLE FLOWER SCHOOL, RAPTI NAGAR, GORAKHPUR
FIRST SEMESTER EXAMINATION 2020-2021

Class: VII
Chemistry

TIME: 2Hours
Max Marks: 100

SECTION - A

I- Fill in the blanks with the suitable word(s):- **(10×1=10)**

- 1) The space anything occupies is called its
- 2) Slaking of lime is a change.
- 3) In galvanization, a thin layer of forms on the surface of a metal.
- 4) Iron combines with oxygen and of the air to form rust.
- 5) A/An can be broken down into simpler substances by chemical means.
- 6) All are good conductors of heat and electricity.
- 7) The melting point of a solid is the same as the..... point of corresponding liquid.
- 8) When a solid dissolves in a liquid, the volume of the liquid..... .
- 9) Graphite and are lustrous non-metals.
- 10) A molecule of a is made up of atoms of two or more kinds.

II- State whether the following statements are true or false:- **(10×1=10)**

- 1) The melting point of ice is the same as the boiling point of water.
- 2) Physical change is irreversible.
- 3) Iodine is lustrous as well as a good conductor of electricity.
- 4) Quicklime absorbs moisture.
- 5) Heat is evolved when concentrated hydrochloric acid is poured into water.
- 6) Chemical bonds are stronger than cohesive forces.
- 7) A mixture of iron and sulphur undergoes a chemical change when heated.
- 8) Diamond, though a nonmetal, is the hardest substance known.
- 9) Matter is made up of very small particles, called atoms, which are held together by intermolecular force.
- 10) Depositing a layer of tin over an iron object is called galvanizing.

III- Match the following:- **(10×1=10)**

- | | |
|-------------------------|---------------------------------|
| 1) Sulphur | a) rusts |
| 2) Nitrogen | b) used in storage batteries |
| 3) Water freezes at | c) a yellow solid |
| 4) Iron | d) a chemical change |
| 5) Lead | e) a red-brown solid |
| 6) Carbon dioxide | f) 0°C |
| 7) The curdling of milk | g) a gas |
| 8) Rust | h) fixed shape and fixed volume |
| 9) Solids | i) a physical change |
| 10) The melting of ice | j) CO ₂ |

IV- Give one word for each of the following:- **(5×1=5)**

- 1) A solid solution, i.e., a homogeneous mixture, of a metal with other metal(s) or nonmetal(s).
- 2) Anything that occupies space and has mass.
- 3) The liquid in which the substance dissolves.
- 4) The state of matter that has negligible intermolecular attraction.
- 5) Elements with properties intermediate between those of metals and nonmetals.

V- Choose the correct options:- **(5×1=5)**

- 1) Which of the following is the best conductor of electricity?

| | |
|--------------|-----------|
| a) Silver | b) Copper |
| c) Aluminium | d) Iron |

- 2) Which of the following is not a reversible change?
 - a) The change of water into water vapour
 - b) The melting of iron
 - c) The burning of kerosene
 - d) The condensation of water vapour
- 3) Which of the following can be split into simpler substances?
 - a) Sulphur dioxide
 - b) Sulphur
 - c) Nitrogen
 - d) Carbon
- 4) In which of the following processes does glucose react with oxygen?
 - a) Sublimation
 - b) Photosynthesis
 - c) Respiration
 - d) Rusting
- 5) Which of the following metals is used for shielding against X-rays?
 - a) Iron
 - b) Copper
 - c) Lead
 - d) Aluminium

SECTION - B

VI -Differentiate between the following- give 3 points for each (any 3):- **(3×3=9)**

- 1) Metal and nonmetal
- 2) Physical and chemical changes
- 3) Element and compound
- 4) Endothermic and exothermic change
- 5) Atom and molecules

VII- Write the formula of the following:- **(6×1=6)**

- 1) Quicklime
- 2) Rusting
- 3) Glucose
- 4) Sulphur dioxide
- 5) Slaked lime
- 6) Ammonia

VIII- Give reasons for the following:- **(5×2=10)**

- 1) Solids do not flow but liquids and gases do.
- 2) Magnesium is used in fire works.
- 3) Impure diamond is used to cut glass.
- 4) Solids, liquids and gases differ in their physical state.
- 5) Melting of wax, is considered a physical change while burning of a candle, a chemical change.

IX- Answer the following questions (any 5):- **(5×5=25)**

- 1) Explain the ice-water inter-conversion on the basis of intermolecular force.
- 2) Give two examples to show that the mass of the individual substance(s) undergoing a chemical change is altered.
- 3) a) What is a chemical bond?
b) What do you mean by the corrosion of metals?
c) What do you mean by intermolecular force?
d) What are reversible changes?
e) Give the word equation for rusting.
- 4) Mention any five physical characteristics of metals.
- 5) Giving one example of each kind, show that a change in energy takes place when a physical or a chemical change occurs.
- 6) Why a solid is not compressible but a gas is? Explain.
- 7) Describe an activity to show that the 'lead' of a pencil conducts electricity but a piece of sulphur does not.

X- Draw and label the diagram (any two):- **(2×5=10)**

- 1) Show with the help of a diagram rusting takes place in moist air.
- 2) Show with the help of a diagram when a solid dissolves in a liquid, the volume of the liquid does not change.