

Student Roll Number

Example Student Roll No.

1 | 3 | 5 | 2 | 4 | 6

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|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 |

Sign. and Seal of Supdt:

Paper: CHEMISTRY

Part: 9th

Time: . 20 Minutes

Marks: 12

Exam Code: 9171

NOTE

**FILL IN THE
CORRECT CIRCLE ONLY**

1. A Cation is:
A) natural, B) negatively charged, C) positively charged, D) coloured,

2. The noble metals are very:
A) reactive, B) passive, C) soft, D) electronegative,

3. Ionization potential of hard metals is:
A) low, B) high, C) zero, D) negative,

4. 10 gm of solute present in 100 gm of solution is called:
A) v/w %, B) v/v %, C) w/v %, D) w/w %,

5. Water droplet in air is an example of solution of:
A) gas in gas, B) gas in liquid, C) liquid in gas, D) liquid in liquid,

6. Which one of the following is an electrolyte?
A) sugar solution, B) table salt solution, C) plastic, D) wood,

7. The number of valence electrons of Group-II elements is:
A) 2, B) 4, C) 6, D) 8,

8. Which kind of bond exists in HCl?
A) purely ionic, B) polar covalent, C) covalent, D) coordinate covalent,

9. Which metal occurs in liquid state?
A) Na, B) Ca, C) Hg, D) Pt,

10. The chemistry which deals with the qualitative and quantitative analysis of matter is called chemistry. A) organic, B) inorganic, C) analytical, D) industrial,

11. The number of molecules in 0.5 mole of glucose is:
A) 3.01×10^{23} , B) 12.04×10^{23} , C) 3.01×10^{-23} , D) none of these,

12. The chemical properties of an atom depend upon: A) no. of neutrons in nucleus,
B) no. of protons in nucleus, C) no. of electrons in outermost shell, D) all these,

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CHEMISTRY — 9th

Time: 2 Hours 40 Minutes

SECTION-B

Marks: 32

1. Attempt any eight of the following. All carry equal marks.
 - i. Calculate the molecular mass of sugar.
 - ii. What do you mean by atomic number? Give example.
 - iii. Give electronic configuration of ^{10}A , ^{12}B .
 - iv. What are the isotopes of chlorine? Draw their structure.
 - v. Explain duplet and octet rule with examples.
 - vi. Write physical properties of solid.
 - vii. Define solubility and molarity.
 - viii. Find the oxidation number of sulphur in H_2SO_4 and nitrogen in HNO_3 .
 - ix. What are weak and strong electrolytes? Give two examples of each.
 - x. Differentiate between metals and non-metals.
 - xi. Write physical properties of sodium.

SECTION-C

Marks: 21

NOTE: Attempt any three of the following questions. All questions carry equal marks.

2. i. Give reasons that alloys are mixtures not compounds.
ii. What did Rutherford deduced from his experiments? Give diagram.
3. i. What is electronegativity? Write its trend in periodic table.
ii. If 3dm^3 of air is heated from 300 K to 400 K at constant pressure then what is the volume of the gas at high temperature?
4. i. How diffusion differs from effusion.
ii. Calculate the molarity of solution which has 0.530g of Na_2CO_3 in 250cm^3 of solution.
5. i. Describe Daniell cell.
ii. Write down chemical properties of halogens.