

SEMESTER-TWO

CHEMISTRY

Class XII

Sample Paper—1

Max. Marks: 50

Time Allowed: 90 minutes

General Instructions:

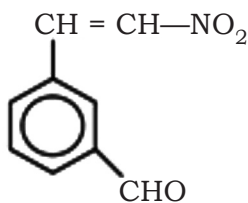
- (i) This question paper consists of 40 questions in 4 sections.
- (ii) Section A consists of 10 Objective type questions carrying 1 mark each.
- (iii) Section B consists of 10 Fill in the blanks type questions carrying 1 mark each.
- (iv) Section C consists of 10 True or False statement type questions carrying 1 mark each.
- (v) Section D consists of 10 Short answer type questions carrying 2 marks each.

Section A

Select and write one most appropriate option out of the four options given for each of the questions 1–10.

1. The impurities associated with the ore after mining are collectively called
 - (a) flux
 - (b) slag
 - (c) minerals
 - (d) gangue.
2. An ore after levigation is found to have acidic impurities. Which of the following can be used as flux during smelting operation?
 - (a) H_2SO_4
 - (b) CaCO_3
 - (c) SiO_2
 - (d) Both CaCO_3 and SiO_2 .
3. In which of the following minerals, aluminium is not present?
 - (a) Fluorspar
 - (b) Cryolite
 - (c) Feldspar
 - (d) Mica

4. Which oxide of carbon is useful in preparing metal carbonyls?
(a) Both CO_2 and CO (b) CO
(c) CO_2 only (d) CO_2 and C_3O_2 .
5. Which statement is not true about CO ?
(a) It is a colourless gas
(b) It is odourless gas
(c) It is highly soluble in water
(d) It is poisonous gas.
6. Which allotropes of carbon is used as a moderator in reactor?
(a) Graphite (b) Diamond
(c) Both (a) & (b) (d) None of these
7. Which of the following is an amorphous allotropes of carbon?
(a) Graphite (b) Diamond
(c) Coke (d) None of these
8. How many base units are there?
(a) Three (b) Five
(c) Seven (d) None of these
9. This polymer is also known as styrene butadiene rubber.
(a) Buna-S (b) Teflon
(c) Styron (d) None of these
10. Name the functional group of the compound.



- (a) $-\text{CO}-$ (b) $-\text{NH}_2$
(c) $-\text{CHO}$ (d) None of these

Section B

Fill in the blanks with a suitable word for each of the questions 11–20.

11. Froth floatation process is generally employed for ores.
12. The most abundant metal in earth's crust is
13. The purification of crude metal is referred to as

14. The process of reduction of oxides by aluminium is known as
15. Liquid ammonia is used as a
16. is a mixture of one part of conc. HNO_3 and three parts of conc. HCl .
17. A solution in which no more solute can be dissolved in the solvent is called solution.
18. is the energy stored in bonds of a chemical compound.
19. The members of same homologous series are called
20. is an atom or group of atoms which largely determines the properties of the organic compound.

Section C

State whether the following statements are true or false for each of the questions 21–30.

21. A few most unreactive metals occur in nature in free state.
22. The process of extracting pure metal from its ore is known as metallurgy.
23. The ore obtained from the earth's crust is associated with rocky and silicious purities.
24. The process of extraction of metal from the concentrated ore depends upon the nature of the ore as well as the nature of impurities absent in the ore.
25. The process of purification of impure metals is known as purifying.
26. Iron is the second most abundant metal occurring in the earth's crust.
27. The amount of carbon present in steel is nearly intermediate between that contained in cast and wrought iron.
28. The properties of steel can be modified by addition of other metals.
29. Tin is toxic, ductile, malleable, and adapted to all kinds of coldworking, such as rolling, spinning and extrusion.
30. Copper is found in combined as well as in free state.

Section D

Answer each of the questions 31–40.

31. What is metallurgy?
32. Write important ores of iron.

- 33.** What are the isotopes of carbon?
- 34.** Define chemistry.
- 35.** What are the main uses of graphite?
- 36.** Write various steps involved in extraction of gold.
- 37.** Write short notes on:
 - (a) Setting of cement
 - (b) Environmental impact of cement production.
- 38.** List some uses of diamond.
- 39.** What do you mean by chemical bonding?
- 40.** What are the uses of sodium nitrate?