

SECTION B

I. Answer in one sentence: 2x1=2

- Why do silver articles become black after sometime when exposed to air?
- Identify the reducing agent in the following reaction.

II. Fill in the blanks: 2x1=2

- The term used to indicate the development of unpleasant taste and smell in fat and oil containing foods due to oxidation is _____.
- The insoluble substance formed during the chemical reaction is _____

III. Choose the right option from the following statements:

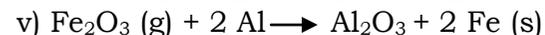
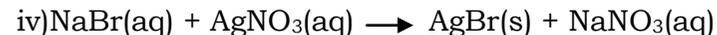
1x1=1

- Assertion: (A): Loss of oxygen is reduction.
Reason: (R): Reducing agent removes oxygen from the reactant
- i) (A) is correct ii) (R) alone is correct
iii) Both (A) and (R) are correct
iv) Both (A) and (R) are incorrect

SECTION B

IV. Answer in brief: 5x3=15

- What is rancidity? Mention any two ways by which rancidity can be prevented?
- Select precipitation reaction and displacement reaction from the following chemical equations.
 - $\text{ZnCO}_3 (\text{s}) \longrightarrow \text{ZnO} (\text{s}) + \text{CO}_2 (\text{g})$
 - $\text{Pb} (\text{s}) + \text{CuCl}_2 (\text{aq}) \longrightarrow \text{AgBr} (\text{s}) + \text{NaNO}_3 (\text{aq})$
 - $\text{H}_2 (\text{g}) + \text{Cl}_2 (\text{g}) \longrightarrow 2\text{HCl} (\text{g})$



3. Explain the following terms with chemical equations

- i) Oxidation
- ii) Reduction

4. What changes in the colour of iron nails and copper sulphate solution do you observe after keeping the iron nails dipped in copper sulphate solution for about 30 minutes? Write the relevant chemical equation.

5. A brown substance 'x' on heating in air forms a substance 'y' when hydrogen gas is passed over heated 'y' it changes back into 'x'.

- Name the substance 'x' and 'y'.
- name the chemical process occurring during both the changes
- Write the chemical equations involved in both the changes

SECTION C

V. Answer in detail: 1X5=5

- Define corrosion.
 - What is corrosion of iron called?
 - How will you recognize the corrosion of silver?
 - Why corrosion of iron is serious problem?
 - How can we prevent corrosion?

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MATHS TT

Marks: 25

STD: X [MAJ, AWE, EXE, CAP]

I. Answer the following:

4x1=4

1. The Sum of first five positive integers divisible by b is ____.
2. The Sum of first 'n' terms of the series a,3a,5a,is ____.
3. If the first term of an A.P is -5 and the common difference is 2, then the sum of the first 6 terms is ____.
4. If a=3, n=8, s=192, find d.

II. Answer the following:

2x2=4

5. Find the sum, 2+4+6+....+200.
6. Find AP, whose sum of n terms is $2n^2+n$?

III. Answer the following:

3x3=9

7. If the nth term of an AP is $(2n+1)$. Find the sum of the first n terms of the AP.
8. The sum of n,2n,3n terms of an AP are S_1, S_2, S_3 respectively. Prove that $S_3=3(S_2-S_1)$.
9. In an AP, given a=5, d=3, $a_n=50$. Find n and S_n .

IV. Solve:

2x4=8

10. Find the sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively.
11. A man repays a loan of ₹3250 by paying ₹20 in the first month and then increases the payment by ₹15 every month. How long will it take him to clear the loan?