



BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL



Pre-MidTerm-Test 2024-25

CHEMISTRY (043) Answer Key

Class : XII

Date : 29 /7/2024

Admission No.:

Duration: 1 Hr

Max. Marks: 25

Roll No.:

General Instructions:

- There are 12 questions in all. All questions are compulsory.
- This question paper has three sections: Section A, Section B and Section C.
- All the sections are compulsory.
- Section A contains five questions of 1 mark each, out of which one question is assertion and reasoning type question.
- Section B contains four questions of two marks each, Section C contains four questions of three marks each.
- There is no overall choice. Use of calculators is not allowed.

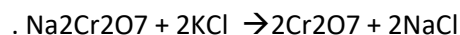
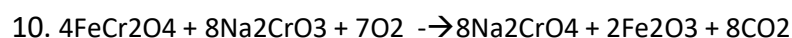
SECTION-A

- (d) Fe^{2+}
- (d) natural radioactivity.
- (b) 0, 6
- (b) Linkage isomers
- (a) Both Assertion and reason are true and reason is correct explanation of assertion.

SECTION – B

- (i) one of the common oxidation state has ($4d^9$) which is unpaired.
(ii) most of the elements have unpaired electron in them.
- (i) fully filled orbital 2
(ii) Mn
- (i) same kinds of groups and different types of group (ii) Examples 2
- Diagram and name of orbitals 2

SECTION C



Yellow solution of Na_2CrO_4 is filtered and acidified with H_2SO_4 to give a solution from which orange sodium dichromate $\text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$ is crystallised 3

11. (i) Iodine molecule is formed (ii) Iron (III) is formed (iii) S is formed

3

12. (a) $[\text{Pt}(\text{NH}_3)_2\text{Cl}(\text{NO}_2)]$ diamminechloridonitrito-N- platinum (II) (b) Potassium trioxalato chromate(III) (c) bis (ethane-1,2-diammine)dichloridocobalt(III) chloride

13. On the basis of the following observations made with aqueous solutions, assign secondary valences to metals in the following compounds: 3

Formula	Secondary valencies
(i) $\text{PdCl}_2 \cdot 4\text{NH}_3$	4
(ii) $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$	6

(iii) $\text{PtCl}_4 \cdot 2\text{HCl}$	6
(iv) $\text{CoCl}_3 \cdot 4\text{NH}_3$	6
(v) $\text{PtCl}_2 \cdot 2\text{NH}_3$	4

-----ALL THE BEST-----