

**Exercise-1**

✎ Marked Questions may have for Revision Questions.

**ONLY ONE OPTION CORRECT TYPE****Section (A) : Oxidation number**

- The oxidation number that iron does not exhibit in its common compounds or in its elemental state is -  
(1) 0 (2) +1 (3) +2 (4) +3
- ✎ The oxidation state of nitrogen varies from:  
(1) -3 to +5 (2) 0 to +5 (3) -3 to 1 (4) +3 to +5
- When  $\text{H}_2\text{SO}_3$  is converted into  $\text{H}_2\text{SO}_4$  the change in the oxidation state of sulphur is from :  
(1) 0 to +2 (2) +2 to +4 (3) +4 to +2 (4) +4 to +6
- The halogen that shows same oxidation state in all its compounds with other elements is :  
(1)  $\text{I}_2$  (2)  $\text{F}_2$  (3)  $\text{Cl}_2$  (4)  $\text{Br}_2$
- Most stable oxidation state of gold is -  
(1) +1 (2) +3 (3) +2 (4) zero
- ✎ The most stable oxidation state of chromium is -  
(1) +5 (2) +3 (3) +2 (4) +4
- Which can have both +ve and -ve oxidation states?  
(1) F (2) I (3) Na (4) He
- Which metal exhibits more than one oxidation states?  
(1) Na (2) Mg (3) Al (4) Fe
- The most common oxidation state of an element is -2. The number of electrons present in its outer most shell is :  
(1) 2 (2) 4 (3) 6 (4) 8
- Conversion of  $\text{PbSO}_4$  to  $\text{PbS}$  the oxidation number of sulphur in  $\text{PbS}$  is-  
(1) -2 (2) +6 (3) +4 (4) -1
- ✎ Oxidation state of oxygen in  $\text{H}_2\text{O}_2$  is :  
(1) -2 (2) -1 (3) +1 (4) +2
- The oxidation number of phosphorus in  $\text{Mg}_2\text{P}_2\text{O}_7$  is :  
(1) +5 (2) -5 (3) +6 (4) -7

**Section (B) : Inorganic nomenclature**

- Correct formula of aluminium perchlorate is :  
(1)  $\text{Al}(\text{ClO})_3$  (2)  $\text{Al}(\text{ClO}_2)_3$  (3)  $\text{Al}_2(\text{ClO}_3)_3$  (4)  $\text{Al}(\text{ClO}_4)_3$

2. Sodium chlorite is :  
 (1)  $\text{NaClO}_3$                       (2)  $\text{NaClO}_2$                       (3)  $\text{NaClO}$                       (4)  $\text{NaClO}_4$
3. Aluminium phosphide is :  
 (1)  $\text{AlP}_3$                       (2)  $\text{Al}_2\text{P}_3$                       (3)  $\text{AlP}$                       (4)  $\text{Al}_3\text{P}_2$
4. Formula of Dioxygen difluoride is :  
 (1)  $\text{OF}_2$                       (2)  $\text{O}_2\text{F}$                       (3)  $\text{O}_2\text{F}_2$                       (4)  $\text{O}_2\text{F}_3$
5. Barium azide is :  
 (1)  $\text{BaN}$                       (2)  $\text{Ba}_2\text{N}_3$                       (3)  $\text{Ba}(\text{N}_3)_2$                       (4)  $\text{Ba}_3\text{N}_2$
6. Silicon fluoride Formula is :  
 (1)  $\text{SiF}$                       (2)  $\text{SiF}_3$                       (3)  $\text{SiF}_4$                       (4)  $\text{SiF}_6$
7. Aluminium carbide is :  
 (1)  $\text{Al}_2\text{C}$                       (2)  $\text{Al}_4\text{C}_3$                       (3)  $\text{AlC}_3$                       (4)  $\text{AlC}$
8. Which of the following set of element not forms metaoxy acids:  
 (1) Cl, S, N                      (2) Cl, S, P                      (3) Si, C, B                      (4) C, Si, P
9. Name of oxyanion of boric acid ( $\text{H}_3\text{BO}_3$ ) is :  
 (1) Borate ion                      (2) Boraite ion                      (3) Hypo Borite ion                      (4) Per borate ion

## Exercise-2

➤ Marked Questions may have for Revision Questions.

1. The oxidation number of sulphur in  $\text{H}_2\text{SO}_5$   
 (1) +3                      (2) +5                      (3) +6                      (4) +8
2. Which of the following is a correct statement.  
 (1) The name of  $\text{SO}_3^{2-}$  is sulphite  
 (2)  $\text{ZnF}_3$  is correct formula  
 (3) Zn can only show the oxidation state +3  
 (4) The element having atomic numbers 29 lies in p-block

3. Match column-I with column II and select correct.

	Column-I		Column-II
(I)	$\text{CO}_3^{2-}$	(P)	Carbonate ion
(II)	$\text{N}_3^-$	(Q)	Azide ion
(III)	$\text{O}_2^{2-}$	(R)	Acetate ion
(IV)	$\text{CH}_3\text{COO}^-$	(S)	Peroxide ion

Code

- |     |   |    |     |    |     |   |    |     |    |
|-----|---|----|-----|----|-----|---|----|-----|----|
|     | I | II | III | IV |     | I | II | III | IV |
| (1) | P | Q  | R   | S  | (2) | P | Q  | S   | R  |
| (3) | R | S  | Q   | R  | (4) | R | P  | Q   | S  |

4. Dichromate ion is :  
(1)  $\text{CrO}_4^{2-}$  (2)  $\text{Cr}_2\text{O}_7^{2-}$  (3)  $\text{CrO}_3$  (4)  $\text{Cr}_2\text{O}_4$
5. In following compound dithionic acid is :  
(1)  $\text{H}_2\text{S}_2\text{O}_6$  (2)  $\text{H}_2\text{S}_2\text{O}_4$  (3)  $\text{H}_2\text{SO}_5$  (4)  $\text{H}_2\text{S}_2\text{O}_3$
6. Mercurous azide is  
(1)  $\text{Hg}_2(\text{N}_3)_2$  (2)  $\text{HgN}_3$  (3)  $\text{Hg}_2\text{N}_3$  (4)  $\text{Hg}(\text{N}_3)_2$
7. Ethyl methyl ether,  $\text{CH}_3\text{—O—C}_2\text{H}_5$ , is used as an anaesthetic. Formula for corresponding thioether would be  
(1)  $\text{CH}_3\text{—S—C}_2\text{H}_5$  (2)  $\text{CH}_3\text{—O—S—C}_2\text{H}_5$  (3)  $\text{C}_2\text{H}_5\text{—O—CH}_3$  (4)  $\text{C}_2\text{H}_5\text{—O—CH}_2\text{SH}$
8. Hydracid which contains nitrogen is  
(1)  $\text{HN}_3$  (2)  $\text{HNO}_3$  (3)  $\text{HNO}_2$  (4)  $\text{NH}_3$
9. Anhydride of  $\text{HClO}_4$  is  
(1)  $\text{Cl}_2\text{O}_7$  (2)  $\text{ClO}_3$  (3)  $\text{Cl}_2\text{O}_5$  (4)  $\text{ClO}_2$
10. In the conversion of  $\text{Br}_2$  to  $\text{BrO}_3^-$ , the oxidation state of bromine changes from-  
(1) 0 to +5 (2) -1 to +5 (3) 0 to -3 (4) +2 to +5
11. Oxidation number of S in  $\text{S}_2\text{Cl}_2$  is :  
(1) +1 (2) +6 (3) 0 (4) -1
12. Which of the following element shows only -1 oxidation number in combined state :  
(1) F (2) Cl (3) Br (4) I
13. The oxidation number of Fe in  $\text{FeS}_2$  is  
(1) +4 (2) +2 (3) +1 (4) zero
14. Which of the following oxyacids forms pyroxyacids :  
(1)  $\text{H}_3\text{PO}_4$  (2)  $\text{H}_3\text{BO}_3$  (3)  $\text{H}_2\text{SO}_4$  (4) All of these
15. Sodium tri-sulphide Formula is :  
(1)  $\text{Na}_2\text{S}_3$  (2)  $\text{Na}_3\text{S}$  (3)  $\text{Na}_3\text{S}_2$  (4)  $\text{Na}_2\text{S}$
16.  $\text{PO}_4^{3-}$  is :  
(1) Phosphate ion (2) Phosphite ion (3) Hypophosphite ion (4) Pyrophosphite ion
17. Pyrophosphoric acid is :  
(1)  $\text{H}_3\text{PO}_4$  (2)  $\text{H}_4\text{P}_2\text{O}_5$  (3)  $\text{H}_4\text{P}_2\text{O}_7$  (4)  $\text{H}_3\text{PO}_3$

**Answers****EXERCISE - 1****SECTION (A)**

- |    |     |    |     |     |     |     |     |     |     |    |     |    |     |
|----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|-----|
| 1. | (2) | 2. | (1) | 3.  | (4) | 4.  | (2) | 5.  | (4) | 6. | (2) | 7. | (2) |
| 8. | (4) | 9. | (3) | 10. | (1) | 11. | (2) | 12. | (1) |    |     |    |     |

**SECTION (B)**

- |    |     |    |     |    |     |    |     |    |     |    |     |    |     |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|
| 1. | (4) | 2. | (2) | 3. | (3) | 4. | (3) | 5. | (3) | 6. | (3) | 7. | (2) |
| 8. | (1) | 9. | (1) |    |     |    |     |    |     |    |     |    |     |

**EXERCISE - 2**

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.  | (3) | 2.  | (1) | 3.  | (2) | 4.  | (2) | 5.  | (1) | 6.  | (1) | 7.  | (1) |
| 8.  | (1) | 9.  | (1) | 10. | (1) | 11. | (1) | 12. | (1) | 13. | (2) | 14. | (4) |
| 15. | (1) | 16. | (1) | 17. | (3) |     |     |     |     |     |     |     |     |