



Additional Problems for Self Practice (APSP)

* Marked Questions may have more than one correct option.

PART - I : ONLY ONE OPTION CORRECT TYPE

1. Strontium metaphosphate is
(A) $\text{Sr}(\text{PO}_3)_2$ (B) SrHPO_3 (C) $\text{Sr}_3(\text{PO}_4)_2$ (D) $\text{Sr}_2\text{P}_2\text{O}_7$
2. Nickel (II) pyroselenate is
(A) $\text{Ni}_2\text{Se}_2\text{O}_7$ (B) NiSe_2O_7 (C) $\text{Ni}_2\text{Se}_2\text{O}_5$ (D) NiSe_2O_5
3. The formula of sodium tungstate is Na_2WO_4 and that of lead phosphate is $\text{Pb}_3(\text{PO}_4)_2$. What is the formula for lead tungstate ?
(A) PbWO_4 (B) $\text{Pb}_2(\text{WO}_4)_3$ (C) $\text{Pb}_3(\text{WO}_4)_2$ (D) $\text{Pb}_3(\text{WO}_4)_4$
4. Mercurous azide is
(A) $\text{Hg}_2(\text{N}_3)_2$ (B) HgN_3 (C) Hg_2N_3 (D) $\text{Hg}(\text{N}_3)_2$
5. $\text{Fe}[\text{Fe}(\text{CN})_6]$ is
(A) ferroferrocyanide (B) Ferriferrocyanide (C) ferroferricyanide (D) ferriferrocyanide
6. Ethyl methyl ether, $\text{CH}_3\text{--O--C}_2\text{H}_5$, is used as an anaesthetic. Formula for corresponding thioether would be
(A) $\text{CH}_3\text{--S--C}_2\text{H}_5$ (B) $\text{CH}_3\text{--O--S--C}_2\text{H}_5$ (C) $\text{C}_2\text{H}_5\text{--O--CH}_3$ (D) $\text{C}_2\text{H}_5\text{--O--CH}_2\text{SH}$
7. Hydracid which contains nitrogen is
(A) HN_3 (B) HNO_3 (C) HNO_2 (D) NH_3
8. Anhydride of HClO_4 is
(A) Cl_2O_7 (B) ClO_3 (C) Cl_2O_5 (D) ClO_2
9. Correct name of the compound NaCrO_2 will be
(A) Sodium metachromate (B) Sodium metachromite
(C) Sodium orthochromate (D) Sodium orthochromite
10. A-pyro acid cannot be formed by
(A) HClO_4 (B) H_2SO_4 (C) H_3PO_4 (D) H_3BO_3
11. Correct name for $\text{Na}_2\text{CaP}_2\text{O}_7$ is
(A) Sodium calcium pyrophosphate (B) Sodium calcium metaphosphate
(C) Sodium calcium orthophosphate (D) None of these
12. Correct formula for rubidium metagallate is
(A) RbGaO_2 (B) Ru_2GeO_2 (C) Rb_3GaO_3 (D) Ru_2GaO_3

PART - II : ONE OR MORE THAN ONE OPTIONS CORRECT TYPE

1. Names of which of the following acids end in -ic acid?
(A) H_2SO_4 (B) HClO_4 (C) H_2SO_3 (D) HNO_2
2. Names of which of the following end in -ous acid ?
(A) HNO_2 (B) H_2CO_3 (C) H_2SO_3 (D) HBO_2
3. Identify the meta-acids
(A) HMnO_4 (B) H_2SnO_3 (C) HClO_3 (D) HPO_3
4. Prefix pyro-is attached to the names
(A) As_2O_3 (B) $\text{S}_2\text{O}_7^{2-}$ (C) Sb_2O_5 (D) $\text{H}_4\text{As}_2\text{O}_7$
5. Which of the following acids are ortho-acids
(A) H_3PO_4 (B) H_3BO_3 (C) $\text{H}_4\text{Si}_2\text{O}_7$ (D) H_5IO_6



6. Correct name is written against which of the following chemical formulae ?
 (A) CaSe_2O_7 Calcium pyroselenate (B) $\text{Ni}(\text{HSO}_3)_2$ nickel(II) metasulphite
 (C) $\text{N}_2\text{H}_5\text{N}_3$ hydrazinium nitride (D) CsOBr Cesium hypobromite
7. What formula would be expected for a binary compound formed between strontium and nitrogen ?
 (A) Sr_3N (B) Sr_2N_3 (C) $\text{Sr}(\text{N}_3)_2$ (D) Sr_3N_2
8. Which of the following acids cannot be simply converted into other acids by addition or removal of water ?
 (A) H_3PO_4 (B) HPO_3 (C) H_3PO_3 (D) H_3PO_2

PART - III : SUBJECTIVE QUESTIONS

1. Write the names the following compounds
 (a) $\text{Ca}(\text{HS})_2$ (b) $\text{Ca}(\text{OCl})_2$ (c) CH_3COONa (d) NaOCN
 (e) $\text{Ca}(\text{HCO}_3)_2$ (f) $\text{Mg}(\text{HSO}_4)_2$ (g) Hg_2SO_4 (h) Cu_2S
2. Write the names the following compounds
 (a) $\text{Co}(\text{ClO}_3)_3$ (b) Al_2S_3 (c) $\text{Mg}_3(\text{BO}_3)_2$ (d) $\text{Na}_2(\text{MnO}_4)$
 (e) $\text{Mg}_3(\text{AsO}_3)_2$ (f) $\text{Ca}(\text{C}_2\text{O}_4)$ (g) $\text{Ca}_3(\text{AsO}_4)_2$ (h) FeAsO_4
 (i) ClO_2^- (j) SeO_3^{2-} (k) CaWO_4 (l) $\text{Mg}(\text{IO})_2$
 (m) Hg_2I_2 (n) HgCl_2
3. Give the chemical formulae for
 (a) hydroiodic acid (b) hypoiodous acid (c) iodous acid (d) iodic acid
 (e) periodic acid (f) iodide ion (g) hypoiodite ion (h) iodite ion
 (i) iodate ion (j) periodate ion
4. Give the formula of compounds :
 (a) Magnesium nitride (b) Barium fluoride (c) Iron(III) sulphide
 (d) Strontium hydride (e) Indium (I) chloride (f) Rubidium superoxide
 (g) Cesium iodide (h) Calcium phosphide (i) Stannous chloride
 (j) Potassium ozonide (k) Chromium (III) oxide (l) Potassium peroxide
5. Write the chemical formula of following compounds :
 (a) Potassium pyrosulphite (b) Potassium hydrogenpyrophosphate (c) Barium permanganate
 (d) Vanadium(III) phosphate (e) Ferric sulphate (f) Magnesium phosphite
 (g) Cadmium nitride (h) Calcium metab orate (i) Ammonium hyponitrite
 (j) Aluminium hydrogenphosphite



APSP Answers

PART - I

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

PART - II

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|---------|---------|---------|---------|---------|
| 1. (AB) | 2. (AC) | 3. (BD) | 4. (BD) | 5. (AB) |
| 6. (AD) | 7. (CD) | 8. (CD) | | |

PART - III

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| (a) Calcium bisulphide or hydrogen sulphide | (b) Calcium hypochlorite |
| (c) Sodium acetate | (d) Sodium cyanate |
| (e) Calcium bicarbonate | (f) Magnesium bisulphate or hydrogen sulphate |
| (g) Mercurous sulphate or Mercury (I) sulphate | (h) Cuprous sulphide or copper (I) sulphide |
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|------------------------------|---|---------------------------|
| (a) Cobalt(III) chlorate | (b) Aluminium sulphide | (c) Magnesium orthoborate |
| (d) Sodium manganite | (e) Magnesium orthoarsenite | (f) Calcium oxalate |
| (g) Calcium (ortho) arsenate | (h) Ferric (ortho) arsenate or Iron(III) ortho arsenate | |
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|---------------------|----------------------------------|----------------------------------|----------------------------------|----------------------|--------------------|
| (a) HI | (b) HIO | (c) HIO ₂ | (d) HIO ₃ | (e) HIO ₄ | (f) I ⁻ |
| (g) IO ⁻ | (h) IO ₂ ⁻ | (i) IO ₃ ⁻ | (j) IO ₄ ⁻ | | |
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|------------------------------------|------------------------------------|------------------------------------|----------------------|-----------------------------------|----------------------|
| (a) Mg ₃ N ₂ | (b) BaF ₂ | (c) Fe ₂ S ₃ | (d) SrH ₂ | (e) InCl | (f) RbO ₂ |
| (g) CsI | (h) Ca ₃ P ₂ | (i) SnCl ₂ | (j) KO ₃ | (l) K ₂ O ₂ | |
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|--|---|---|--|---|------------------------|
| (a) K ₂ S ₂ O ₅ | (b) KH ₃ P ₂ O ₅ | (c) Ba(MnO ₄) ₂ | (d) VPO ₄ | (e) Fe ₂ (SO ₄) ₃ | (f) MgHPO ₃ |
| (g) Cd ₃ N ₂ | (h) Ca(BO ₂) ₂ | (i) (NH ₄) ₂ N ₂ O ₂ | (j) Al(H ₂ PO ₃) ₃ | | |