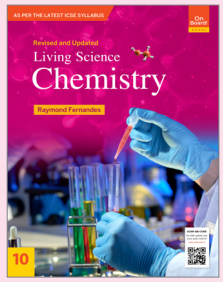
# ICSE Living Science CHEMISTRY

Class 10




# Multiple-Choice Questions

## CHAPTER 14: PRACTICAL CHEMISTRY

1. In the dry test analysis, if the gas evolved is neutral to litmus and rekindles a glowing splinter, then the gas liberated is .....

(a) $O_2$ (b) $N_2$
(c) $CO_2$ (d) $H_2$

Ans: a

2. In the dry test analysis, if the gas liberated is reddish brown in colour and turns moist blue litmus red, then the gas liberated is .....

(a) $SO_2$ (b) $NO_3$
(c) $NO_2$ (d) $N_2O$

Ans: c

3. In the dry test analysis, if the gas evolved turns red litmus blue and gives white fumes with a rod dipped in conc. HCl, then the gas evolved is .....

(a) $N_2$ (b) $SO_2$
(c) $CO_2$ (d) $NH_3$

Ans: d

4. In question 3 above, the radical present is .....

(a) $H_3O^+$ (b) $NH_4^+$
(c) $NH_2^+$ (d) $H_2O^+$

Ans: b

5. If droplets of water are condensed on the cooler part of the test tube, it implies that the salt contains .....

(a) water of hydration. (b) water of ionization.
(c) water of crystallization. (d) water of condensation.

Ans: c

6. ..... crystalline hydrated copper sulphate turns into a ..... anhydrous powder.

(a) Green, white (b) Red, white
(c) Yellow, white (d) Blue, white

Ans: d

7. $Zn^{2+}$ compound is ..... in colour, while its hot residue after heating is ..... in colour.

(a) white, green (b) green, white
(c) white, yellow (d) white, red

Ans: c

8. The extract formed by dissolving the salt in water is called the ..... extract.
   (a) acid
   (b) water
   (c) alkali
   (d) salt
   Ans: b

9. When NaOH is added to the original solution of $Cu^{2+}$, ..... precipitate is obtained, which is ..... in excess of NaOH.
   (a) green, insoluble
   (b) yellow, soluble
   (c) white, insoluble
   (d) bluish white, insoluble
   Ans: d

10. $Pb(OH)_2 + 2NaOH \longrightarrow$ ..... $+ 2H_2O$
   (a) $Na_3PbO_2$
   (b) $NaPbO_2$
   (c) $Na_2PbO_2$
   (d) $Na_2PbO_4$
   Anc: c

11. When $NH_4OH$ is added to the original solution of ....., gelatinous brown precipitate is obtained which is insoluble in excess of alkali.
   (a) $Fe^{3+}$
   (b) $Fe^{2+}$
   (c) $Na^{+}$
   (d) $Cu^{2+}$
   Ans: a

12. $Zn(OH)_2 + 4NH_4OH \longrightarrow$ ..... $+ 4H_2O$
   (a) $[Zn(NH_2)_4](OH)_2$
   (b) $[Zn(NH_3)_4](OH)_2$
   (c) $[Zn(NH_4)_4](OH)_2$
   (d) $[Zn(NH_3)_5](OH)_2$
   Ans: b

13. The formula for Nessler's reagent is .....
   (a) $KHgI_4$
   (b) $K_2HgI$
   (c) $KHgI_3$
   (d) $K_2HgI_4$
   Ans: d

14. ..... is used to identify the chloride radical and the nitrate radical.
   (a) Concentrated sulphuric acid
   (b) Concentrated nitric acid
   (c) Concentrated hydrochloric acid
   (d) Dilute sulphuric acid
   Ans: a

15. Hydrogen chloride gas gives a ..... precipitate when passed through $AgNO_3$ solution, which dissolves in excess ..... solution.
   (a) pale blue, NaOH
   (b) green, $NH_4OH$
   (c) curdy white, $NH_4OH$
   (d) curdy white, NaOH
   Ans: c

16. Add concentrated sulphuric acid to the given salt along with a few copper turnings. Heat the test tube gently and carefully. A brownish gas is evolved on warming, which turns moist blue litmus red and starch iodide paper blue. This is a test for which radical?
   (a) Sulphate
   (b) Nitrate
   (c) Chloride
   (d) Oxide
   Ans: b

17. The presence of the nitrate radical can be confirmed by the brown ring test. The brown ring is present at the junction of which two liquids?

(a) Iron(II) sulphate solution and dilute sulphuric acid

(b) Iron(II) chloride solution and concentrated sulphuric acid

(c) Iron(II) sulphate solution and concentrated sulphuric acid

(d) Iron(II) sulphate solution and concentrated hydrochloric acid

Ans: c

18. The gas is liberated with effervescence. It also turns blue litmus solution red and lime water milky. Which radical is being referred to here?

(a) Sulphate

(b) Chloride

(c) Nitrate

(d) Carbonate

Ans: d

19. Which of the following is not an observation while identifying sulphite radical?

(a) The gas evolved smells of burning sulphur.

(b) It turns moist red litmus blue.

(c) It turns acidified potassium dichromate paper green.

(d) It decolourises potassium permanganate solution.

Ans: b

20. $(CH_3COO)_2Pb + H_2S \longrightarrow 2CH_3COOH +$ .....

(a) PbO

(b) $Pb(OH)_2$

(c) PbS

(d) $PbCl_2$

Ans: c