

Lab Safety and Practical Skills

Sr	Questions	Answers Choice
1	The addition of HCl to a carbonate salt leads to.	A. Effervescence B. Blue colour formation C. White precipitate D. No visible reaction
2	Why is it important to use a pipette in titration	A. To hold the acid B. To measure a fixed volume of the solution accurately C. To detect the endpoint D. To mix the acid and alkali
3	addition of NH_4OH to an aqueous solution of cation gives a green precipitate which turns brown upon standing, Which basic radical is indicated.	A. Cr^{3+} B. Cu^{2+} C. Fe^{2+} D. Fe^{3+}
4	Which of the following is the most suitable indicator for the titration of a strong acid and a strong base.	A. Phenolphthalein B. Methyl orange C. Universal indicator D. Litmus
5	Which cation forms a white precipitate with NaOH that dissolves in excess NaOH	A. Mg^{2+} B. Zn^{2+} C. Ca^{2+} D. Ba^{2+}
6	The brown ring tests a confirmatory test for which acid radical	A. Nitrate B. Chloride C. Sulfate D. Carbonate
7	While taking a reading with a burette, why is it always advisable to read the lower meniscus for the colorless liquids and the upper meniscus for the colored liquids.	A. Because it is more convenient B. Because colorless liquids have more surface tension than colored liquids C. Because of the parallax effect D. Because lower meniscus does not exist for colored liquids
8	A salt solution gives a brick red flame test. The cation present is likely	A. Na^+ B. K^+ C. Ca^{2+} D. Sr^{2+}
9	Lab coats are important because they.	A. Are fashionable B. Prevent contamination and protect clothing C. Make you feel like a scientist D. Keep you warm
10	Why phenolphthalein indicator is more appropriate to use during the titrations which involve a strong acid and a strong base.	A. Because it is itself weakly acidic B. Because the pH at the equivalence point as well as the pH over where the colour of phenolphthalein changes match each other C. Because the solution at the end of titration is acidic D. Because the solution at the end of titration is basic
11	Eating and drinking in the lab is	A. Allowed during breaks B. Allowed if you're careful C. Strictly prohibited D. Allowed in the chemistry lab but not physics
12	Which is the proper way to smell a chemical	A. Inhale deeply B. Waft the vapour toward your nose C. Sniff directly D. Open the bottle under our nose
13	Before starting a titration, the burette should be	A. Heated B. Rinsed completely C. Washed with distilled water only D. Rinsed with the solution to be used

		D. Rinsed with the solution it will contain
14	The chromyl chloride test is a specific confirmatory test for	A. Chloride ions B. Bromide ion C. Iodide ions D. sulfate ions
15	Which of the following is a primary standard solution.	A. NaOH B. Na ₂ CO ₃ C. KOH D. HCl
16	Which cation gives a white gelatinous precipitate upon the addition of aqueous ammonia.	A. Cr ³⁺ B. Cr ²⁺ C. Zn ²⁺ D. Al ³⁺
17	What is the typical volume of solution a pipette delivers in titration	A. 25 ml B. 10 ml C. 50 ml D. 100 ml
18	Which of the following pairs would require methyl orange as an indicator	A. Strong acid and strong base B. Weak acid and strong base C. Strong acid and weak base D. Weak acid and weak base
19	On dry heating test for salt analysis that turns lime water milky suggests the presence of, the evolution of colorless, odorless gas is	A. Carbonate ion B. Chloride ion C. Sulfate ion D. Nitrate ion
20	A gas with a pungent smell turns moist red litmus paper blue. The gas is likely	A. NH ₃ B. HCl C. CO ₂ D. SO ₂