

## Lab Safety and Practical Skills

Sr	Questions	Answers Choice
1	The end point of a titration is indicated by	A. Formation of a gas B. Change in temperature C. Colour change of the indicator D. Change in pressure
2	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
3	A salt solution gives a brick red flame test. The cation present is likely	A. $\text{Na}^+$ B. $\text{K}^+$ C. $\text{Ca}^{2+}$ D. $\text{Sr}^{2+}$
4	What is the typical volume of solution a pipette delivers in titration	A. 25 ml B. 10 ml C. 50 ml D. 100 ml
5	Before starting a titration, the burette should be	A. Heated B. Drained completely C. Washed with distilled water only D. Rinsed with the solution it will contain
6	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
7	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
8	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
9	Addition of $\text{NH}_4\text{OH}$ to an aqueous solution of a cation gives a green precipitate which turns brown upon standing. Which basic radical is indicated.	A. $\text{Cr}^{3+}$ B. $\text{Cu}^{2+}$ C. $\text{Fe}^{2+}$ D. $\text{Fe}^{3+}$
10	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
11	The chromyl chloride test is a specific confirmatory test for	A. Chloride ions B. Bromide ion C. Iodide ions D. Sulfate ions
12	Which cation forms a white precipitate with $\text{NaOH}$ that dissolves in excess $\text{NaOH}$	A. $\text{Mg}^{2+}$ B. $\text{Zn}^{2+}$ C. $\text{Ca}^{2+}$ D. $\text{Ba}^{2+}$
13	The brown ring test is a confirmatory test for which acid radical	A. Nitrate B. Chloride C. Sulfate D. Carbonate
14	Which apparatus is used to deliver a variable volume of solution in titration.	A. Pipette B. Burette C. Beaker D. Measuring cylinder

15	Which cation gives a white gelatinous precipitate upon the addition of aqueous ammonia.	A. $\text{Cr}^{3+}$ B. $\text{Cr}^{2+}$ C. $\text{Zn}^{2+}$ D. $\text{Al}^{3+}$
16	A white precipitate that dissolves in excess ammonia is likely to be	A. Zinc hydroxide B. Calcium carbonate C. Lead iodide D. Barium sulphate
17	A gas with a pungent smell turns moist red litmus paper blue. The gas is likely	A. $\text{NH}_3$ B. $\text{HCl}$ C. $\text{CO}_2$ D. $\text{SO}_2$
18	The addition of $\text{HCl}$ to a carbonate salt leads to.	A. Effervescence B. Blue colour formation C. White precipitate D. No visible reaction
19	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 which 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
20	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