

19 Multiple choice questions

1. a solution that has an accurately known concentration
 - a. titration
 - b. spectator ion
 - c. standard solution
 - d. neutralisation

2. a solution of known composition and concentration used during titrations
 - a. refluxing
 - b. titrant
 - c. indicator
 - d. titration

3. an oxide that displays neither acidic nor basic properties e.g. CO, N₂O and NO
 - a. neutralisation
 - b. weak acid
 - c. neutral oxide
 - d. neutral salt

4. an atom or a group of atoms in all members of a homologous series that bestows certain chemical and physical properties onto the group
 - a. functional group
 - b. homologous
 - c. indicator
 - d. neutral oxide

5. a common technique of volumetric analysis in which a standard solution of one reagent is added little by little from a burette to a second reagent whose concentration is to be determined until the end point is reached
 - a. titrant
 - b. titration
 - c. indicator
 - d. neutralisation

6. a solution in which the acid is ionised only to a small extent
 - a. weak acid
 - b. indicator
 - c. titration
 - d. strong acid

7. a process of heating a reaction mixture in a vessel with an upright cooling condenser attached, preventing the loss of volatile reactants and products and allowing a higher temperature for the reaction
- refluxing
 - titrant
 - titration
 - weak acid
8. a series or family of similar carbon compounds differing in their number of $\text{-CH}_2\text{-}$ groups but containing the same functional group
- indicator
 - homologous
 - titration
 - hydrolysis
9. a solution in which the acid is effectively 100% ionised and/or dissociated
- hydrolysis
 - weak acid
 - strong acid
 - neutral oxide
10. a substance that indicates when the concentration of a chemical species has passed a certain pH by a change in colour
- weak acid
 - titrant
 - titration
 - indicator
11. a principle that states that if a system at equilibrium is disturbed, the system tries to adjust itself so as to minimise that disturbance
- Le Chatelier's principle
 - neutralisation
 - neutral oxide
 - functional group
12. the system provided by the IUPAC for clearly naming chemicals with an explicit or implied relationship to the structure of compounds
- IUPAC nomenclature
 - functional group
 - ionisation reaction
 - indicator

13. the reaction between an acid and a base to produce salt and water only
 - a. neutral salt
 - b. neutral oxide
 - c. neutralisation
 - d. titration

14. the reaction between a molecular substance and water producing ions
 - a. neutralisation
 - b. strong acid
 - c. ionisation reaction
 - d. titration

15. a quantitative analysis of solutions having unknown concentration of some chemical, though the volume of the solution is known, by adding a reagent of known concentration until a reaction end point is reached
 - a. volumetric analysis
 - b. neutral oxide
 - c. neutral salt
 - d. hydrolysis

16. a substance formed when a strong acid is neutralised by a strong base or when a weak acid is neutralised by a weak base
 - a. titrant
 - b. neutralisation
 - c. neutral salt
 - d. neutral oxide

17. a reaction with water
 - a. hydrolysis
 - b. homologous
 - c. refluxing
 - d. neutral salt

18. a substance of relatively high purity and stability that a solution of accurate concentration can be made from by direct weighing of a pure and dry chemical e.g. sodium carbonate
 - a. primary standard
 - b. neutral salt
 - c. weak acid
 - d. titrant

19. an ion present in solution and does not take part in the reaction, there to preserve charge neutrality
- a. neutralisation
 - b. indicator
 - c. titration
 - d. spectator ion