

## 25 Multiple choice questions

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- a chemical substance that prevents any large changes to its pH if small amounts of acid or base are added
  - exothermic
  - alkali
  - buffer
  - dilute
- a substance that can disperse one liquid in another immiscible one
  - equivalence point
  - esterification
  - emollient
  - emulsifying agent
- a reaction where heat is taken in
  - endothermic
  - dilute
  - exothermic
  - end point
- the point reached during a titration when enough base has been added to neutralise the acid or when enough acid has been added to neutralise the base
  - equivalence point
  - emollient
  - end point
  - emulsifying agent
- a softening agent
  - dilute
  - emollient
  - end point
  - alkali
- an oxide that shows acidic properties, but not basic properties
  - acidic oxide
  - basic oxide
  - acidic salt
  - acid rain

7. the oxide of a metal that displays basic properties, but not acidic properties
  - a. acid rain
  - b. basic salt
  - c. basic oxide
  - d. acidic oxide
  
8. a substance that, in solution, can produce hydrogen ions
  - a. carboxylic acids
  - b. arrhenius acid
  - c. arrhenius base
  - d. amphiprotic
  
9. a major class of organic compounds having the general formula RCOOH where R is an organic group
  - a. carboxylic acids
  - b. acidic oxide
  - c. amphoteric oxide
  - d. arrhenius acid
  
10. acid and base pairs where the base has one proton less than the acid
  - a. conjugate acid-base pairs
  - b. acid rain
  - c. condensed reaction
  - d. equivalence point
  
11. the rate of forward reaction being the same as the rate of reverse reaction in a chemical reaction
  - a. acidic salt
  - b. basic salt
  - c. dynamic equilibrium
  - d. basic oxide
  
12. rain that has a higher concentration of hydrogen ions than pure water
  - a. acidic oxide
  - b. acid rain
  - c. basic salt
  - d. acidic salt

13. a chemical reaction in which an organic acid chemically bonds with an alcohol, with the elimination of water
- exothermic
  - dissociation
  - acid rain
  - esterification
14. a substance that can act as both a proton donor and a proton acceptor e.g. H<sub>2</sub>O
- acidic oxide
  - exothermic
  - amphiprotic
  - acid rain
15. the point during a titration when the indicator changes colour, signalling that the reactants have completely reacted
- endothermic
  - end point
  - emollient
  - acid rain
16. an oxide that shows both acidic properties or basic properties depending on the condition e.g. ZnO
- amphoteric oxide
  - basic oxide
  - amphiprotic
  - acidic oxide
17. a reaction where one of the products is water e.g. esterification
- arrhenius acid
  - concentrated
  - dissociation
  - condensed reaction
18. the process where ions that already exist in an ionic compound are released when that substance dissolves
- esterification
  - acid rain
  - basic oxide
  - dissociation

19. a substance formed when a strong acid is neutralised by a weak base
- acid rain
  - acidic salt
  - basic salt
  - acidic oxide
20. a substance that, in solution, can produce an hydroxide ion
- arrhenius acid
  - acidic salt
  - acid rain
  - arrhenius base
21. a water soluble compound of the alkali metals (or ammonia) and acts as a strong base producing a high concentration of hydroxide ions in aqueous solution
- alkali
  - emollient
  - dilute
  - buffer
22. a substance formed when a weak acid is neutralised by a strong base
- acid rain
  - basic salt
  - basic oxide
  - acidic salt
23. a reaction where heat is given out
- endothermic
  - amphiprotic
  - acid rain
  - exothermic
24. a solution containing a relatively small amount of solute
- buffer
  - dilute
  - emollient
  - alkali

25. a solution containing a relatively large amount of solute
- a. acid rain
  - b. concentrated
  - c. dilute
  - d. emollient