

## 24 Multiple choice questions

---

- ethanol derived from plant material
  - biomass
  - cathode
  - bioethanol
  - alkanols
- organic compounds derived from saturated or unsaturated hydrocarbons by replacing a hydrogen atom by a hydroxyl (-OH) group
  - cracking
  - alkane
  - alkanols
  - anode
- a carbon that can be hydrolysed into two simpler sugars
  - cathode
  - cracking
  - disaccharide
  - anode
- the number of protons in the nucleus of an atom
  - atomic number
  - anode
  - alkane
  - biopolymers
- a bond formed by the sharing of two pairs of electrons between atoms
  - dehydration
  - double bond
  - cyclotron
  - covalent bond
- a type of charged particle accelerator in which the particles travel in a spiral path in a strong magnetic field, thus achieving greater speeds
  - cathode
  - dehydration
  - calimetry
  - cyclotron

7. weak attractive forces between molecules
  - a. disaccharide
  - b. biopolymers
  - c. dispersion forces
  - d. bioethanol
  
8. a source of direct electric current made up of one or more galvanic cells
  - a. biomass
  - b. cathode
  - c. battery
  - d. calimetry
  
9. an oxidation-reduction reaction in which a more reactive metal displaces a less reactive metal from a solution of its ions
  - a. additional reaction
  - b. dehydration
  - c. disaccharide
  - d. displacement reaction
  
10. cracking using catalysts to sustain and perpetuate the reaction
  - a. covalent bond
  - b. cracking
  - c. catalyst
  - d. catalytic cracking
  
11. the process of removing water
  - a. cyclotron
  - b. accelerators
  - c. double bond
  - d. dehydration
  
12. a type of chemical bond involving the sharing of pairs of electrons between atoms
  - a. cathode
  - b. cyclotron
  - c. covalent bond
  - d. double bond

13. polymers made totally, or in large part, by living organisms
  - a. bioethanol
  - b. calimetry
  - c. biomass
  - d. biopolymers
  
14. the measurement of the heat changes associated with chemical reactions and physical processes
  - a. battery
  - b. anode
  - c. cyclotron
  - d. calimetry
  
15. a method where simple monomer units unite together to form a long-chain polymer by simple addition
  - a. additional reaction
  - b. condensation polymerisation
  - c. biopolymers
  - d. additional polymerisation
  
16. a reaction where a double or triple bond breaks open so that "new" atoms may be added to the primary compound
  - a. additional reaction
  - b. displacement reaction
  - c. dehydration
  - d. additional polymerisation
  
17. an electrode at which a reduction occurs; the positive terminal of a galvanic cell
  - a. battery
  - b. cathode
  - c. anode
  - d. catalyst
  
18. a method where simple monomer units unite together to form a long-chain polymer with the elimination of some small molecule between the pairs of monomers
  - a. condensation polymerisation
  - b. additional polymerisation
  - c. biopolymers
  - d. additional reaction

19. atomic research tools used to accelerate subatomic particles to high velocities
- cathode
  - alkanols
  - calimetry
  - accelerators
20. an electrode at which oxidation occurs; the negative terminal of a galvanic cell
- anode
  - cathode
  - alkanols
  - alkane
21. the total mass, or weight, of living material in a particular area
- battery
  - alkane
  - bioethanol
  - biomass
22. a hydrocarbon, such as propane  $C_3H_8$ , that does not contain any double or triple bonds
- anode
  - alkane
  - alkanols
  - cathode
23. a process in which heavy hydrocarbon molecules in petroleum are broken down into smaller, lighter molecules
- cathode
  - cracking
  - alkanols
  - alkane
24. a chemical that can change the rate of a chemical reaction but remains unchanged at the end of the reaction
- battery
  - alkane
  - catalyst
  - cathode