



Multiple Choice Questions

1. The ability of carbon atoms to form chains is called

- (a) isomerism (b) catenation
(c) resonance (d) condensation

2. Coal having 90% carbon contents is called

- (a) peat (b) lignite
(c) anthracite (d) bituminous

3. Main component of natural gas is

- (a) methane (b) propane
(c) butane (d) propene

4. The strong heating of coal in retorts in the absence of air is called

- (a) fractional distillation
(b) sublimation
(c) roasting
(d) destructive distillation

5. Pitch is black residue of

- (a) coke (b) coal-tar
(c) coal (d) coal gas

6. Natural gas is 85% methane. It is used to make the following except

- (a) carbon black (b) ethane
(c) propane (d) coal gas

7. Which one of the following does not contain starch

- (a) sugar cane (b) maize
(c) barley (d) potatoes

8. Petroleum is refined by

- (a) destructive distillation
(b) fractional distillation
(c) simple distillation
(d) dry distillation

9. In laboratory urea was prepared by

- (a) Wohler (b) Rutherford
(c) Berzelius (d) Dalton

10. General formula of alkyl radical is

- (a) $\text{C}_n\text{H}_{2n+2}$ (b) $\text{C}_n\text{H}_{2n-2}$
(c) $\text{C}_n\text{H}_{2n+1}$ (d) C_nH_{2n}

11. Identify which one of the following compounds is a ketone?

- (a) $(\text{CH}_3)_2\text{CHOH}$
(b) $(\text{CH}_3)_2\text{CHCl}$
(c) $(\text{CH}_3)_2\text{CO}$
(d) $(\text{CH}_3)_2\text{CHCl}$

12. The functional group – COOH is found in

- (a) carboxylic acid
(b) aldehydes
(c) alcohols
(d) esters

13. Which one of the following statements is not true about fossil fuels?

- (a) they all contain carbon
- (b) they are renewable
- (c) they produce pollutants when burnt
- (d) they cause acid rain

14. Which one of the following is the hardest coal?

- (a) peat
- (b) lignite
- (c) bituminous
- (d) anthracite

15. In which of the following groups, oxygen is attached on both sides with carbon atoms?

- (a) ketone
- (b) ether
- (c) aldehyde
- (d) ester

16. Carbonization process is the conversion of

- (a) coal into coal gas
- (b) coal into wood
- (c) wood into coal
- (d) wood into coal tar

17. Coal gas is a mixture of

- (a) CO and CH₄
- (b) CO, CH₄, CO₂
- (c) CO, CH₄, H₂
- (d) CO, H₂ and CO₂

18. Which one of the following is a synthetic fibre?

- (a) cotton
- (b) wool
- (c) nylon
- (d) silk

19. Which one of the following is not a fossil fuel?

- (a) coal
- (b) natural gas
- (c) biogas
- (d) petroleum

20. Which one of the following does not contain protein

- (a) pulses
- (b) potatoes
- (c) beans
- (d) eggs

21. Conversion of dead plants into coal by the action of bacteria and heat is called

- (a) carbonization
- (b) catenation
- (c) hydrogenation
- (d) cracking

22. Which one of the following compounds is an aldehyde?

- (a) CH₃ - CH₂ - OH
- (b) CH₃ - COOH
- (c) CH₃CHO
- (d) CH₃COCH₃

23. Formula of acetaldehyde is

- (a) CH - CH₂ OH



- (b) CH₃ - C - OH



- (c) CH₃ - C - H



- (d) H - C - H

24. Who put forward the vital force theory?

- (a) Berzelius
- (b) Wohler
- (c) Dalton
- (d) Lavoisier

25. Who was discarded vital force theory?

- (a) Berzelius
- (b) Wohler
- (c) Dalton
- (d) Lavoisier

26. The 1st organic compound prepared in laboratory

- (a) Sodium Chloride
(b) Urea
(c) thiourea (d) Pyridine
- 27. Who was prepared acetic acid in laboratory?**
(a) Berzelius (b) Wohler
(c) Kolbe (d) Dalton
- 28. The branch of chemistry which deals with the study of hydrocarbons and their derivatives is known as**
(a) Organic chemistry
(b) Inorganic chemistry
(c) Biochemistry
(d) Nuclear Chemistry
- 29. The formula which represents the actual number of atoms in one molecule of organic compound is called**
(a) Molecular formula
(b) Structural formula
(c) Condensed formula
(d) Dot and cross formula
- 30. Molecular formula of butane is**
(a) C_4H_{10} (b) C_5H_5
(c) C_4H_8 (d) C_4H_6
- 31. Which of the following formula of a compound represents the exact arrangement of the different atoms of various elements present in a molecule of a substance?**
(a) Molecular formula
(b) Structural formula
(c) Condensed formula
(d) Dot and cross formula
- 32. Which one is homocyclic compound?**
(a) Benzene (b) Cyclobutane
(c) Cyclohexane (d) All
- 33. Which one is hetrocyclic compound?**

- (a) Benzene (b) Cyclobutane
(c) Thiophene (d) Naphthalene
- 34. Silicon occurs in the form of**
(a) Silica (b) Silicates
(c) both a & b (d) None
- 35. Which one contains double covalent bond?**
(a) Pentane (b) ethylene
(c) acetylene (d) all
- 36. Which one contains triple covalent bond?**
(a) Pentane (b) ethylene
(c) acetylene (d) all
- 37. Coal is blackish complex mixture of compounds of**
(a) Carbon (b) hydrogen
(c) oxygen (d) all
- 38. Conversion of wood into coal is called**
(a) Carbonization
(b) destructive distillation
(c) fractional distillation
(d) all
- 39. The % age of carbon in coal is**
(a) 40-60 (b) 50-70
(c) 40-80 (d) 40-90
- 40. The % age of carbon in peat is**
(a) 60% (b) 70%
(c) 80% (d) 90%
- 41. The % age of carbon in lignite is**
(a) 60 (b) 70
(c) 80 (d) 90
- 42. The % age of carbon in bituminous is**
(a) 60 (b) 70
(c) 80 (d) 90

43. The strong heating of coal in the absence of air is called

- (a) Carbonization
(b) Destructive distillation
(c) Fractional distillation (d) All

44. Coal gas is the mixture of

- (a) hydrogen (b) methane
(c) Carbon monoxide (d) all

45. Coal tar contains compounds

- (a) benzene (b) phenol
(c) toluene (d) all

46. The % age of carbon in coke is

- (a) 60 (b) 70
(c) 90 (d) 98

47. Natural gas contains

- (a) methane (b) ethane
(c) propane (d) all

48. The general formula of alkane is

- (a) C_nH_{2n+2} (b) C_nH_{2n-2}
(c) C_nH_{2n} (d) C_nH_{2n+1}

49. Alkyl radical is derivative of

- (a) alkane (b) alkene
(c) alkyne (d) all

50. The functional group of alcohol is

- (a) $-OH$ (b) $-X$
(c) $\begin{array}{c} O \\ || \\ -C-H \end{array}$ (d) $\begin{array}{c} O \\ || \\ -C-OH \end{array}$

51. Aldehyde family consists of functional group

- (a) $-OH$ (b) $-X$
(c) $\begin{array}{c} O \\ || \\ -C-H \end{array}$ (d) $\begin{array}{c} O \\ || \\ -C-OH \end{array}$

52. Ketonic group contains the functional group

- (a) $-OH$ (b) $-X$
(c) $\begin{array}{c} O \\ || \\ -C- \end{array}$ (d) $\begin{array}{c} O \\ || \\ -C-OH \end{array}$

53. Carboxylic group contains functional

- (a) $-OH$ (b) $-X$
(c) $\begin{array}{c} O \\ || \\ -C-H \end{array}$ (d) $\begin{array}{c} O \\ || \\ -C-OH \end{array}$

Answer Key

1	b	2	c	3	a	4	d	5	b
6	b,c	7	a	8	b	9	a	10	c
11	c	12	a	13	d	14	d	15	b
16	c	17	c	18	c	19	c	20	b
21	a	22	c	23	c	24	a	25	b
26	b	27	c	28	a	29	a	30	a
31	b	32	d	33	c	34	c	35	b
36	c	37	d	38	a	39	d	40	a
41	b	42	c	43	b	44	d	45	d
46	d	47	d	48	a	49	a	50	a
51	c	52	c	53	d				