

## MDCAT Chemistry Chapter 12 Transition Elements Online Test

Sr	Questions	Answers Choice
1	The maximum number of isomer for an alkene with the molecular formula $C_2H_8$	A. 2 B. 3 C. 4 D. 5
2	Which of the following compound shows the geometrical isomerism	A. 2-butene B. 2-butyne C. 2-butanol D. Butanol
3	Nitro alkanes exhibit the:	A. Chain isomerism B. Positional isomerism C. Functional group D. Metamerism
4	State of hybridization of carbon in the carbocation is	A. $sp^3$ B. $sp$ C. $sp^2$ D. $dsp^2$
5	2-propanol shows-----isomerism with 1-propanol	A. Chain isomerism B. Positional isomerism C. Metamerism D. Geometrical isomerism
6	If similar groups are attached to the same side, of $C=C$ of alkene then it is	A. Cis isomer B. Trans isomer C. Tautomer D. All
7	Indicate the number of open chain isomers of $C_6H_{14}$	A. 4 B. 5 C. 6 D. 7
8	Ether show the phenomenon of	A. Positional isomerism B. Functional group isomeris C. Meta merism D. Cis trans isomerism
9	As the number of carbon atoms increases the number of isomers also increase. The 5 C compound pentane has as many as	A. 3 isomers B. 5 isomers C. 6 isomers D. 10 isomers
10	1-chloropropane and 2.chloropropane are isomers of each other, the type of isomerism in these two is called	A. Cis-trans isomerism B. Position isomerism C. Chain isomerism D. Functional group isomerism
11	Name the compound, which shows geometric isomerism	A. 1-bromo-2-chloropropene B. 2,3-dimethylpropene C. 2-pentene D. Both A & B
12	Cyclobutane structure is categorized under	A. Aromatic compounds B. Aliphatic compounds C. Alicyclic compounds D. Heterocyclic compounds
13	Butane molecule can have maximum no of isomers	A. 2 B. 5 C. 4 D. 3
14	Glucose and fructose are isomers	A. Chain isomers B. Position isomers C. Functional group isomers D. Metamers
15	Which of the compounds cannot show positional isomerism?	A. Alkanes B. Alkenes C. Alkynes D. Alcohols

16	The hetero atom in pyridine is	A. Oxygen B. Nitrogen C. Chlorine D. Sulphur
17	A doubly bonded carbon is	A. cannot be sp <sup>2</sup> hybridized B. can be sp hybridized C. can attach with three carbons D. can attach with three hydrogens
18	In homocyclic compounds the ring consists of	A. Carbon and oxygen atoms B. Carbon and nitrogen atoms C. Only carbon atoms D. Carbon atoms with one hetero atom
19	Alicyclic compounds are the homocyclic compounds which contain a ring of	A. 5 or more carbon atoms B. 6 or more carbon atoms C. 3 or more carbon atoms D. 4 or more carbon atoms
20	Which one of the following is not an alicyclic compound?	A. Cyclohexene B. Cyclohexane C. Benzene D. Cyclopentane
21	Which one of the following is an aromatic compound?	A. Benzene B. Thiophene C. Furan D. All of them
22	Furan is a compound	A. Acyclic B. Alicyclic C. Heterocyclic D. non-aromatic
23	The bond angle between any two sp hybrid orbitals is	A. 107.09° B. 120° C. 90° D. 80°
24	Which one of the following does not show isomerism?	A. Propane B. Hexane C. Butane D. Pentane
25	Butane has isomeric forms	A. 3 B. 4 C. 2 D. 1
26	The structural isomerism arises due to the difference in the	A. Number of atoms in the molecule B. Arrangements of atoms in the molecule C. Number as well as arrangement of atoms in the molecule D. Spatial arrangement of atoms
27	How many secondary carbon atoms are present in Methylcyclopropane	A. 1 B. 2 C. 3 D. 0
28	Which of the following is not heterocyclic compound?	A. Naphthalene B. Furan C. Pyridine D. Pyrrole
29	The aliphatic compounds are of two types	A. Straight chain and cyclic B. Branched chain and alicyclic C. Straight chain and branched D. Homocyclic and alicyclic
30	Which is not present as heteroatom in heterocyclic compounds?	A. Sulphur B. Nitrogen C. Oxygen D. Chlorine
31	Which compound is alicyclic in nature?	A. Cyclobutane B. Isobutane C. n-Butane D. Toluene
32	Pyridine is an example of	A. Homocyclic compound B. Heterocyclic compound C. Carbocyclic compound D. Aliphatic compound

33	Anthracene contains number of fused benzene rings	A. 1 B. 2 C. 3 D. 4
34	The isomerism in which the compounds differ with respect to functional group but have same molecular formula is called	A. Metamerism B. Functional group isomerism C. Position isomerism D. Chain isomerism
35	Which of the following compounds does not exhibit positional isomerism?	A. Alkynes B. Nitroalkanes C. Carboxylic acid D. Alcohol
36	Total number of possible chain and positional isomers of butyl alcohol among alcohols are	A. Four B. Five C. Two D. Six
37	Alkanes do not show geometrical isomerism due to	A. Hyperconjugation B. Resonance C. Rotation around single bond D. Restricted rotation around doubled bond
38	How many esters are possible for $C_2H_4O_2$	A. 3 B. 2 C. 4 D. 5
39	Which class of compound cannot show positional isomerism?	A. Alkanes B. Alkene C. Alkynes D. Alcohol