

## ECAT Chemistry Chapter 18 Fundamental Principles of Organic Chemistry

Sr	Questions	Answers Choice
1	Compounds having the same molecular formula, but different functional groups show	A. Metamerism B. Position isomerism C. Chain isomerism D. Functional group isomerism
2	When a carbon atom forms single bonds with other carbon atoms, these hybrid orbitals overlap with the orbitals of hydrogen to form four bonds which are	A. Three sigma and one P <sub>i</sub> B. Two sigma and two P <sub>i</sub> C. One sigma and three P <sub>i</sub> D. sigma
3	Which of the following has linear shape?	A. SP B. SP <sup>2</sup> C. SP <sup>3</sup> D. None of the above
4	Fossil fuels consist of :	A. Coal B. Natural gas C. Petroleum D. All of these
5	The active part in a molecule is called	A. Hetroatom B. Functional group C. Chemical bond D. Ion
6	Products of coal is:	A. Peat B. Lignite C. Bituminous coal D. All above
7	Which gasoline is better?	A. Of low boiling point B. Of low molecular mass C. Of high octane D. All of these
8	Which of the following is complex?	A. CaSO <sub>4</sub> · 0.5H <sub>2</sub> O B. (C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> ) <sub>n</sub> C. C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> D. CH <sub>4</sub>
9	The next homologue of C <sub>10</sub> H <sub>22</sub> will be	A. C <sub>9</sub> H <sub>20</sub> B. C <sub>12</sub> H <sub>26</sub> C. C <sub>11</sub> H <sub>24</sub> D. C <sub>13</sub> H <sub>28</sub>
10	Compounds having same molecular formula but different structures are said to be	A. Monomers B. Isomers C. Metamers D. Tautomers
11	At present oil refineries in Pakistan are:	A. One B. Two C. Three D. Four
12	Alkanes normally have _____ hybridization	A. Sp B. Sp <sup>2</sup> C. Sp <sup>3</sup> D. d sp <sup>3</sup>
13	The process in which one s and two p orbitals mix up with each other is called	A. Sp-hybridization B. Sp <sup>2</sup> -hybridization C. Sp <sup>3</sup> -hybridization D. Dsp <sup>2</sup> -hybridization
14	Question Image	A. 3 B. 4 C. 5 D. 2

15	In $sp^2$ type hybridization the three equivalent $sp^2$ orbitals lie in the same plane and at angle of	family: arial, sans-serif; font-size: small;">"</span> B. $60^\circ$ <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">">"</span> C. $120^\circ$ <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">">"</span> D. $180^\circ$ <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">">"</span>
16	Which of the following expressions show a heterolytic bond fission	
17	In which molecule carbon atom is $sp^2$ hybridized	A. $CH_4$ B. $C_2H_4$ C. $C_2H_2$ D. None of the above
18	n-butane and iso butane are an example of	A. Chain isomerism B. Positional isomerism C. Meta merism D. Functional group isomerism
19	Question Image	A. 0 B. 1 C. 2 D. 3
20	Which of the following is an aromatic compound	A. Propanol B. Cyclohexane C. Acetone D. Benzene