

CHEMISTRY STUDY MATERIALS FOR CLASS 12

(NCERT BASED QUESTIONS OF ORGANIC PART)

GANESH KUMAR

DATE:- 21/01/2021

Answer the following questions

1. Define organic chemistry.
2. What is meant by the term catenation?
3. Write the necessary conditions of catenation.
4. Why only carbon shows catenation property?
5. Who was responsible for the formation of organic compounds?
6. Who influences the bond length and bond enthalpy (strength) in organic compounds?
7. How many σ and π bonds are present in each of the following molecules?
 - (a) $\text{HC}\equiv\text{CCH}=\text{CHCH}_3$
 - (b) $\text{CH}_2=\text{C}=\text{CHCH}_3$
8. Write the state of hybridisation of carbon in the following compounds and shapes of each of the molecules.
 - (a) $\text{H}_2\text{C}=\text{O}$
 - (b) CH_3F
 - (c) $\text{HC}\equiv\text{N}$.
9. Write the molecular, complete structural and bond line formula of the following compounds;
 - (a) $\text{CH}_3\text{CH}_2\text{COCH}_2\text{CH}_3$
 - (b) $\text{CH}_3\text{CH}=\text{CH}(\text{CH}_2)_3\text{CH}_3$
 - (c) $\text{HO}(\text{CH}_2)_3\text{CH}(\text{CH}_3)\text{CH}(\text{CH}_3)_2$
 - (d) $\text{HOCH}(\text{CN})_2$
10. Write the Wedge-and-dash representation of CH_4
