

CBSE Class 11 Chemistry Chapter 12 Organic Chemistry – Some Basic Principles & Techniques Worksheet – Set 4

Q1. How many sigma and pi bonds are there in cyanogen?

- (a) Three, four
- (b) Two, Three
- (c) One, Two
- (d) None of the above

Q2. Which of the following elements cannot be detected by Lassaigne's test?

- (a) Nitrogen
- (b) Sulphur
- (c) Chlorine
- (d) None of the above

Q3. Which of the following contains a carbonyl functional group?

- (a) Aldehyde
- (b) Ketone
- (c) Carboxylic acid
- (d) All of the above

Q4. What is the general formula of alkenes?

- (a) C_nH_{2n+2}
- (b) C_nH_{2n}
- (c) C_nH_{2n-2}
- (d) None of the above

Q5. Which of the following methods is used to estimate nitrogen?

- (a) Carius method
- (b) Duma's method
- (c) Both (a) and (b)
- (d) None of the above

Q6. What are structural isomers?

Q7. Which family is represented by the general formula C_nH_{2n-2} ? Write the IUPAC name and common name of the first three members of this series.

Q8. What is the principle of chromatography?

- Q9.** Draw the structure of o-ethyl anisole and 4-ethyl-1-fluoro-2-nitro benzene.
- Q10.** What is an addition reaction? Give an example.
- Q11.** Name any two functional groups containing carbonyl bonds.
- Q12.** Give an example of positional isomers.
- Q13.** What is a carbocation? Arrange primary, secondary and tertiary carbocation in order of their stability.
- Q14.** What is an isomerisation reaction? Give an example.
- Q15.** What is dry ice? Give its one use.
- Q16.** What is the resonance effect? Draw the resonating structure of nitrobenzene.
- Q17.** Differentiate between distillation, steam distillation and distillation under reduced pressure.
- Q18.** Explain the principle of Dumas's method of nitrogen estimation.
- Q19.** Differentiate between electrophile and nucleophile.
- Q20.** 0.395 g of an organic compound by the Carius method for estimating sulphur gave 0.582g of barium sulphate. Calculate the percentage of sulphur in the compound.