

CBSE Test Paper-01

Class - 12 Chemistry (Haloalkanes and Haloarenes)

- What is inversion of configuration?
 - secondary butyl chloride
 - w-butyI bromide
 - tert-butyl chloride
 - iso-butyl iodide
- Bromomethane, Chloromethane, Dibromomethane. 1 – Chloropropane, Isopropyl chloride, 1 – Chlorobutane are all
 - Completely soluble in organic solvents
 - Slightly soluble in organic solvents
 - Insoluble in organic solvents
 - Completely soluble in water
- Triiodomethane (Iodoform) is
 - Pesticide
 - Refrigerant
 - antiseptic drug
 - degreasing agent
- Reactions with iodine in preparation of aryl iodide from arenes require the presence of
 - diazonium salt
 - an oxidizing agent
 - a reducing agent
 - ZnCl_2 catalyst
- Anisole reacts with a mixture of concentrated sulphuric and nitric acids to yield a mixture of ortho and paranitroanisole

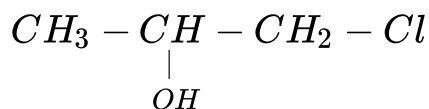


- None of these

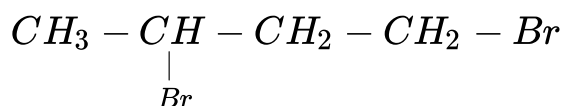
- b. minor product is orthonitroanisole
- c. major product is paranitroanisole
- d. ortho and para in equal amounts.

6. What is meant by axis of symmetry?

7. Give IUPAC names of:

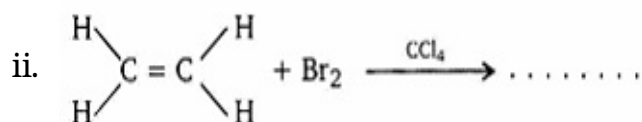
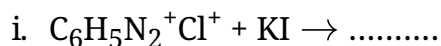


8. Give IUPAC name of:



9. Give the structure of 1,3-dichloro -2-(bromomethyl) propane

10. Complete the following reaction equation:

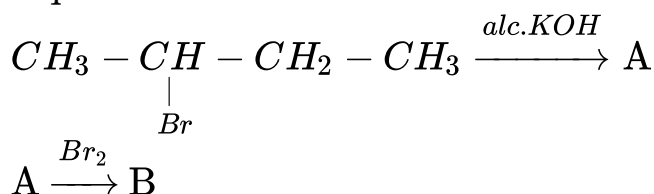


11. Write the structure of the major organic product in the following reaction:



12. A hydrocarbon C_5H_{10} does not react with chlorine in dark but gives a single monochloro compound $\text{C}_5\text{H}_9\text{Cl}$ in bright sunlight. Identify the hydrocarbon.

13. Write the structural formula of the organic compounds A and B in the following sequence of reaction.



14. Point out the difference between:

- i. Chirality and chiral centre.
- ii. Diastereoisomers and Enantiomers.

15. Explain why

- i. the dipole moment of chlorobenzene is lower than that of cyclohexyl chloride?
- ii. alkyl halides, though polar, are immiscible with water?
- iii. Grignard reagents should be prepared under anhydrous conditions?