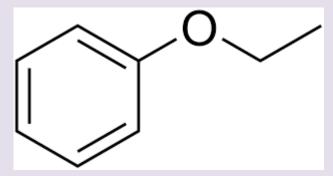
HOTS QUESTIONS

1. Write the metamers of



- **2.** Draw the geometrical isomers of the following:
 - a) 1-bromo-3-chlorocyclobutane
 - b) 3,4-dimethylhept-3-ene
 - c) 1,3-dibromocyclobutane
 - d) 1,4-dimethylcyclohexane
- **3.** Write structural formula for all the compounds having molecular formula C_5H_{10} .
- **4.** Which one more stable: F3C+ or F3C-C+ carbocation? And why?
- **5.** Which continuous hydrocarbon chain is isomeric with 2-methyl-3-ethyl hexane?
- **6.** Why is an organic compound fused with sodium for testing nitrogen, sulphur, phosphorus etc.?
- 7. A mixture contains two compounds A and B. The solubilities of A and B in water near its boiling point are 30g/100ml and 10g/100ml respectively. How will you separate A and B from this mixture?
- **8.** Lassaigne's test is not shown by diazonium salts, though it is containing nitrogen. Why?
- 9. What is the cause of geometrical isomerism in alkenes?
- **10.**Why is it necessary to use acetic acid and not hydrochloric acid for acidification of sodium extract for testing sulphur by lead acetate test?

CLASS: XI

SUBJECT: CHEMISTRY

CHAPTER: 12 (ORGANIC CHEMISTRY: SOME BASIC PRINCIPLES AND TECHNIQUES)

BY Priyanka Paul