

CHEMISTRY:

1. If  $SN^1$  is a racemisation reaction, then which of the following will be the correct reaction for  $SN^2$ ?

Answer.  $SN^2$  is inversion reaction

2. Which of the following does not show a variable oxidation state?

- i. Fluorine
- ii. Chlorine
- iii. Bromine
- iv. Iodine

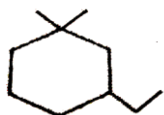
Answer. i. Fluorine

3. Which of the following compounds are polar?

- i.  $CCl_4$
- ii.  $CH_2 = CH_2$
- iii.  $CO_2$
- iv.  $CH_3Cl$

Answer.  $CH_3Cl$

4. What is the correct IUPAC name of the following compound?



- i. 1-ethyl-3,3-dimethyl cyclohexane
- ii. 3-ethyl-1,1-dimethyl cyclohexane
- iii. 1-ethyl-3,3-dimethyl cyclohexene
- iv. 3-ethyl-1,1-dimethyl cyclohexene

Answer. 3-ethyl-1,1-dimethyl cyclohexane

5. The compound  $(CH_2)_4C_2H_2$  is:

- i. Alicyclic
- ii. Aromatic
- iii. Antiaromatic
- iv. Acyclic

Answer. Alicyclic