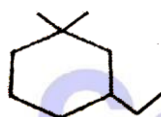


## JEE Main Session 2 Chemistry Exam: Model 1

- If  $\text{SN}^1$  is a racemisation reaction, then which of the following will be the correct reaction for  $\text{SN}^2$ ?
- Which of the following does not show a variable oxidation state?
  - Fluorine
  - Chlorine
  - Bromine
  - Iodine
- Arrange the given compounds in order of their basic strength.
- Which of the following compounds are polar?
  - $\text{CCl}_4$
  - $\text{CH}_2 = \text{CH}_2$
  - $\text{CO}_2$
  - $\text{CH}_3\text{Cl}$
- Which of the following has the highest enol content?
- Arrange the following compounds in order of their basic strength.
- What is the correct IUPAC name of the following compound?



- 1 - ethyl - 3,3-dimethyl cyclohexane
  - 3 - ethyl - 1,1-dimethyl cyclohexane
  - 1 - ethyl - 3,3-dimethyl cyclohexene
  - 3 - ethyl - 1,1-dimethyl cyclohexene
- The compound  $(\text{CH}_2)_4\text{C}_2\text{H}_2$  is:
    - Alicyclic
    - Aromatic
    - Antiaromatic
    - Acyclic
  - In which of the following compounds, which central atom has +4 oxidation state?
    - $\text{SO}_3$
    - $\text{H}_2\text{SO}_3$
    - $\text{H}_2\text{S}_2\text{O}_7$
    - $\text{BaSO}_4$
  - What is the electronic configuration of Neodymium (60) Nd?
  - Ethanol shows turbidity with Lucas reagent after going through which process?
  - Which type of linkage is present in nucleotide between base and sugar?
  - Find out the number of stereoisomers obtained when 3-methylhex-2-ene reacts with HBr in the presence of peroxide.
  - Among the following, the number of meta-directing groups is:
 

-CN, -NO<sub>2</sub>, -COOH, CH<sub>3</sub>, -SO<sub>3</sub>H, NH<sub>3</sub><sup>+</sup>, -F
  - Assertion: Boron is a Hard Element.  
Reason: Boron has an unusually high melting point due to its crystalline structure.
    - Both Assertion and Reason are true and Reason is the correct explanation of Assertion
    - Both Assertion and Reason are true but Reason is not the correct explanation of Assertion
    - A is true, R is not
    - R is true, A is not

