

Online Assignment (Chemistry)

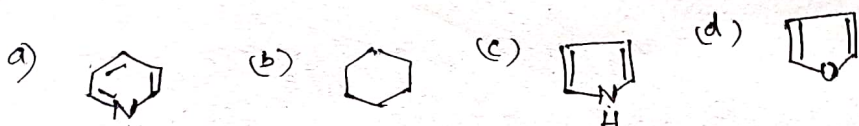
[1st SEM.]

Mode of Submission - email ID \rightarrow sirskb@gmail.com.

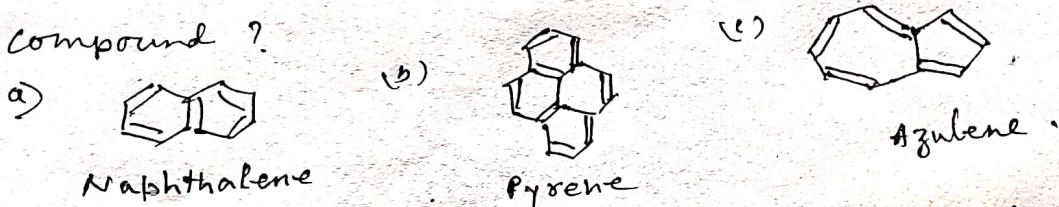
Students should send their answers to the WhatsApp No/Email ID. mentioned, along with their names, classes, roll nos.

Answers any 10 questions. Each question has 2 (two) marks.

1) Which of the following is not aromatic?



2) Which of the following is a non-benzenoid aromatic compound?



3) According to Huckel's rule, which of the following π -electron systems is correct for aromaticity?

a) $4n+1$ (b) $4n+2$ (c) $4n+3$ (d) $4n$.

4) As per the Hammond's postulate, the geometry of transition state in an exothermic rxn resembles that of the (a) reactant (b) product (c) both reactant and product, (d) none of the above.

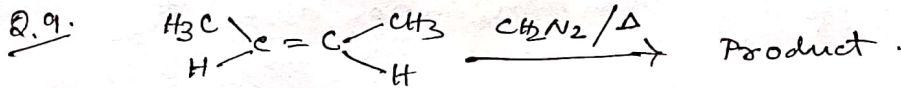
5) The order of stability of carbocations is (a) $1^\circ > 2^\circ > 3^\circ$, (b) $3^\circ > 1^\circ > 2^\circ$ (c) $3^\circ > 2^\circ > 1^\circ$ (d) $2^\circ > 1^\circ > 3^\circ$

6) The order of stability of carbanions is (a) $3^\circ > 2^\circ > 1^\circ$, (b) $1^\circ > 2^\circ > 3^\circ$ (c) $2^\circ > 3^\circ > 1^\circ$ (d) $1^\circ > 2^\circ > 3^\circ$

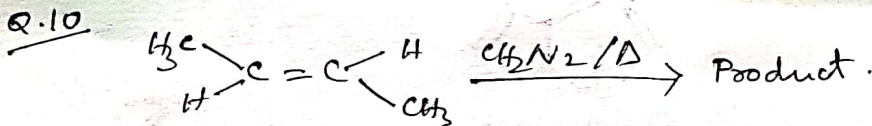
Q.7

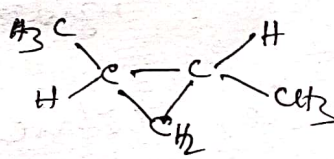
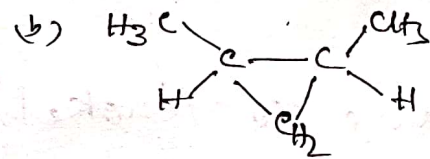
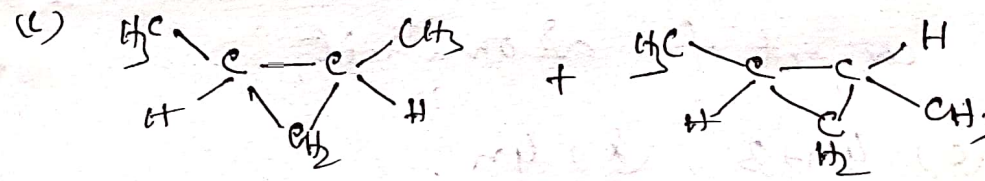
The shape of a carbocation is (a) planar, (b) pyramidal, (c) tetrahedral, (d) None of the above.

Q.8 Which of the following statements regarding $\text{CH}_3\text{-CH}=\text{CH}-\overset{\ominus}{\text{C}}\text{H}_2$ is not correct? (a) The negatively charged carbon atom is sp^3 hybridised. (b) the negatively charged carbon is sp^2 hybridised. (c) three σ -bonds formed by the negatively charged carbon atom are in the same plane. (d) It is a primary carbanion.



The product is (a) cis-1,2-dimethyl cyclopropane. (b) Trans-1,2-cyclopropane. (c) A mixture of cis and trans-1,2-dimethyl-cycloprop. (d) 1,1-dimethyl cyclopropane.



The product is (a)  (b) 
(c)  (d) None of these

Q.11 Ziegler-Natta Catalyst is (a) $\text{TiCl}_4 + \text{Al}(\text{C}_2\text{H}_5)_3$ (b) $\text{Pb}(\text{C}_2\text{H}_5)_2$
(c) $\text{SnCl}_4 + \text{Al}(\text{C}_2\text{H}_5)_3$ (d) None of these.

Q.12 Ziegler-Natta Catalyst is useful in the synthesis of (a) stereoregular polymers (b) atactic polymers (c) condensation polymers (d) thermoplastics.