Assignment 9

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2021-03-24, 23:59 IST.

1) Which of the following is a correct statement about stereospecific reactions?
   - Two products are formed, one major and one trace
   - Only one product is formed
   - Two products are formed in equal ratio
   - None of these

   Accepted Answers:
   - Only one product is formed

2) Choose the correct statement among the following:
   - All stereospecific reactions are 100% stereoselective
   - All stereoselective reactions are 100% stereospecific
   - Some stereospecific reactions are stereoselective but all stereoselective are stereospecific
   - The reactions are not inter-related

   Accepted Answers:
   - All stereospecific reactions are 100% stereoselective

3) What is the hybridization of singlet and triplet carbene respectively?
   - sp and sp
   - sp and sp²
   - sp² and sp²

   Accepted Answers:
   - sp² and sp²

4) Diels-Alder reaction is an example of:
   - Chenoselectivity reactions
   - Regioselectivity reactions
   - Stereospecificity reactions
   - None of these

   Accepted Answers:
   - Stereospecificity reactions

5) The chemical reaction of a chiral substrate with a chiral reagent will yield:
   - unequal amount of diastereomers as the product
   - unequal amount of enantiomers as the product
   - equal amount of diastereomers as the product

   Accepted Answers:
   - unequal amount of diastereomers as the product

6) Which of the following statements explain Crann’s rule?
   - It allows us to predict the major product of an addition reaction to a carbonyl group
   - It allows us to predict the major product of an elimination reaction to a carbonyl group
   - It allows us to predict the major product of an addition reaction to a carboxylic acid group

   Accepted Answers:
   - It allows us to predict the major product of an addition reaction to a carbonyl group

7) Strong electron-negative groups like fluorine deviates from Crann’s rule

   True
   False

   Accepted Answers:
   - False

8) Fukui-Abel model is based on a computational approach

   True
   False

   Accepted Answers:
   - True

9) Order is always equal to the molecularity of the reaction

   True
   False

   Accepted Answers:
   - True

10) The forward step of a multi-step reaction is the rate determining step

   True
   False

   Accepted Answers:
   - False