Assignment 0

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2019-02-04, 23:59 IST.

1) Wilkinson's catalyst is commonly employed in what reaction?

- Catalytic oxygenation
- Nitrogen fixation
- Hydrogenation
- Methanol preparation

No, the answer is incorrect.

Score: 0

Accepted Answers:

Hydrogenation

2) In a metal alkyl compound, which σ-bonded R group could undergo β-hydrogen elimination?

- Et
- CH₂Ph
- CH₂CMe₃
- Me

No, the answer is incorrect.

Score: 0

Accepted Answers:

Et

3) The order of reactivity of alkyl halide towards oxidative addition is

- RCl > RBr > RI
- RBr > RCl > RI
- RI > RCl > RBr

1 point
4) Singlet carbene has-
   - A pair of electron in $sp^2$ orbital
   - One single electron in $sp^2$ orbital
   - A pair of electron in $sp^3$ orbital
   - A pair of electron in $sp$ orbital

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   A pair of electron in $sp^2$ orbital

5) In a spontaneous reaction $DG$ value should be
   - $+Ve$
   - $-Ve$
   - 0
   - Cannot be defined

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   $-Ve$

6) What is the IUPAC name of the following compound?
   \[
   \begin{align*}
   &\text{H}_2\text{C} \equiv \text{C} - \text{C} \equiv \text{C} - \text{H} \\
   &\text{H}_2\text{C} - \text{CH}_3 \\
   &\text{H}_2\text{C} - \text{CH}_2
   \end{align*}
   \]
   - 2,6-diethyl-3-nonyne
   - 2,5-diethyl-3-nonyne
   - 3,7-dimethyl-5-nonyne
   - 3,7-dimethyl-4-nonyne

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   2,6-diethyl-3-nonyne

7) For Heck coupling reaction in olefin insertion step oxidation step of palladium will change as
   - $\text{Pd}(0) \rightarrow \text{Pd}(II)$
   - $\text{Pd}(II) \rightarrow \text{Pd}(II)$
   - $\text{Pd}(II) \rightarrow \text{Pd}(IV)$
   - $\text{Pd}(II) \rightarrow \text{Pd}(0)$

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   $\text{Pd}(II) \rightarrow \text{Pd}(II)$

8) How many equivalent of Grignard reagent is generally used in Kulinkovich reaction?
   - 1 equiv.
   - 2 equiv.
9) What valence electron count is usually associated with stability when thinking about transition metal organometallic complexes?

- 14
- 28
- 16
- 18

No, the answer is incorrect.
Score: 0
Accepted Answers: 
18

10) Organo tin is used as the coupling partner in-

- Kumada coupling reaction
- Suzuki coupling reaction
- Stille coupling reaction
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: 
Stille coupling reaction