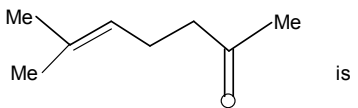


**CHEMISTRY**

1. Which of the following product is formed in the reaction  
 $\text{CH}_3\text{MgBr} \xrightarrow{\text{Dry Ice / acid}} ?$   
A)  $\text{CH}_3\text{COOH}$       B)  $\text{CH}_4$       C)  $\text{CH}_3\text{OH}$       D)  $\text{CH}_3\text{CH}_2\text{CHO}$
2. The ground state electronic configuration of an element of atomic number 47 is  
A)  $[\text{Kr}] 4d^9 5s^2$       B)  $[\text{Xe}] 4d^{10} 5s^1$       C)  $[\text{Kr}] 4d^{10} 5s^1$       D)  $[\text{Kr}] 4d^6 5s^2 5p^3$
3. The colour of the precipitate forms when  $\text{AgNO}_3$  solution reacts with  $\text{S}^{2-}$  ion  
A) red      B) black      C) white      D) yellow
4. Which of the following is an effective reducing agent?  
A)  $\text{H}_2\text{O}$       B)  $\text{H}_2\text{S}$       C)  $\text{H}_2\text{Te}$       D)  $\text{H}_2\text{Se}$
5. The IUPAC name of  $[\text{CuCl}_2\{\text{O}=\text{C}(\text{NH}_2)_2\}_2]$  is  
A) dichloridobis(urea)copper(II)      B) bis(urea)dichloridocopper(II)  
C) dichloridobis(ureaido)copper(II)      D) bis(ureaido)dichloridocopper(II)
6. In the Hydrogen-Oxygen fuel cell, which of the following overall reaction takes place?  
A)  $2\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{H}_2\text{O}(\text{l})$       B)  $2\text{H}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow 2\text{H}_2\text{O}(\text{g})$   
C)  $2\text{H}_2(\text{l}) + \text{O}_2(\text{l}) \rightarrow 2\text{H}_2\text{O}(\text{s})$       D)  $2\text{H}_2(\text{l}) + \text{O}_2(\text{l}) \rightarrow 2\text{H}_2\text{O}(\text{l})$
7. Lower boiling point of ethers in comparison to those of alcohols of comparable molecular masses is due to  
A) polarity of ether      B) dipole moment of ether  
C) absence of extensive hydrogen bonding      D) both A and B
8. The structure of boron nitride is similar to that of  
A) acetylene      B) graphite      C) phosphine      D) sodium chloride
9. The IUPAC name of the compound  
 is  
A) 4 - methyl - 3 - hepten - 2 - one      B) 2 - methyl - 2 - hepten - 6 - one  
C) 6 - methyl - 5 - hepten - 2 - one      D) 4 - methyl - 3 - hepten - 2 - one
10. Benzamide can be converted to bezylamine using  
A)  $\text{Br}_2/\text{KOH}$       B)  $\text{PCl}_5$       C)  $\text{LiAlH}_4$       D)  $\text{NaBH}_4$