Vidyamandir Classes
Gurukul for IITJEE & Medical Preparation

Date Planned : __ / __ / __	Daily Tutorial Sheet-4	Expected Duration : 45 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced Archive	Exact Duration :_____

46. The products obtained via oxymercuration $(HgSO_4 + H_2SO_4)$ of 1-butyne would be : **(1999)**

(A) $CH_3 - CH_2 - \overset{\overset{O}{\|}}{C} - CH_3$ **(B)** $CH_3 - CH_2 - CH_2 - CHO$

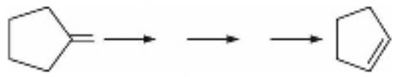
(C) $CH_3 - CH_2 - CHO + HCHO$ **(D)** $CH_3 - CH_2 - COOH + HCOOH$

47. In the compound, $CH_2 = CH - CH_2 - CH_2 - C \equiv CH$ the $C_2 - C_3$ bond is the type : **(1999)**

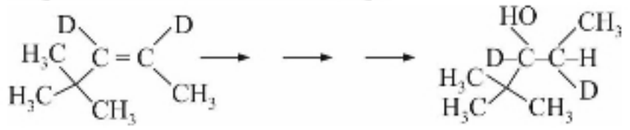
(A) $sp - sp^2$ **(B)** $sp^3 - sp^3$ **(C)** $sp - sp^3$ **(D)** $sp^2 - sp^3$

48. Complete the following reactions with appropriate reagents : **(1999)**

(A)



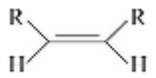
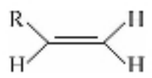
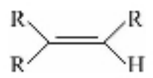
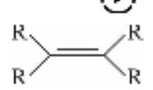
(B)



49. Propyne and propene can be distinguished by : **(2000)**

(A) conc. H_2SO_4 **(B)** Br_2 in CCl_4 **(C)** dil. $KMnO_4$ **(D)** $AgNO_3$ in ammonia

50. Which one of the following alkenes will react fastest with H_2 under catalytic hydrogenation condition ? **(2000)**

(A)  **(B)**  **(C)**  **(D)** 

51. **Statement I** :1-butene on reaction with HBr in the presence of a peroxide produces 1-bromobutane.
Statement II : It involves the formation of a primary radical. **(2000)**

52. In the presence of peroxide, hydrogen chloride and hydrogen iodide do not give anti-Markownikoff's addition to alkenes because : **(2001)**

(A) both are highly ionic

(B) one is oxidizing and the other is reducing

(C) one of the steps is endothermic in both the cases

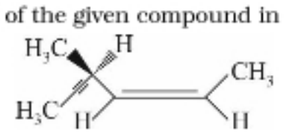
(D) all the steps are exothermic in both the cases

53. The reaction of propene with HOCl proceeds via the addition of : **(2001)**

(A) H^+ in the first step **(B)** Cl^+ in the first step

(C) OH^- in the first step **(D)** Cl^+ and OH^- in single step

54. Hydrogenation of the given compound in the presence of poisoned palladium catalyst gives : **(2001)**



(A) an optically active compound **(B)** an optically inactive compound

(C) a racemic mixture **(D)** a diastereomeric mixture