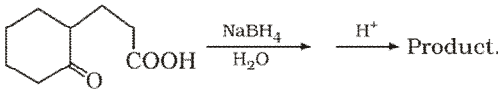
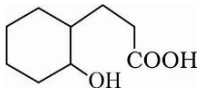
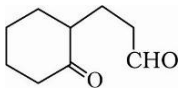
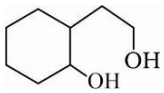
Date Planned : __ / __ / __	Daily Tutorial Sheet-5	Expected Duration : 30 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration :_____

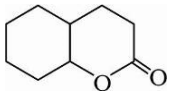
61. 

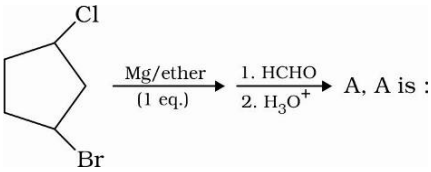
The product is :

(A) 

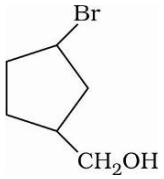
(B) 

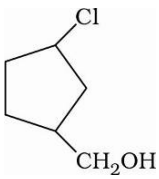
(C) 

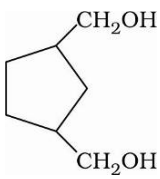
(D) 

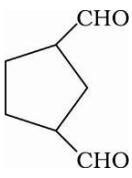
62. 

A, A is :

(A) 

(B) 

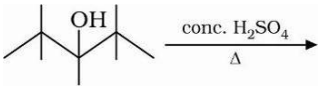
(C) 

(D) 

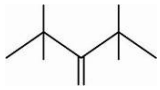
63. Ethanol on reaction with acetic anhydride gives :

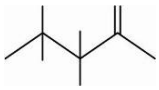
(A) Acetic ester **(B)** Formic ester

(C) Ethanoic acid **(D)** Both acetic ester and ethanoic acid

64. 

The major product is :

(A) 

(B) 

(C) Both (A) and (B) **(D)** None is correct

65. Methanol and water can be separated from a mixture by :

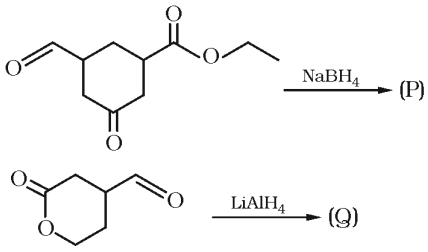
(A) distillation **(B)** fractional distillation

(C) evaporation **(D)** separating funnel

66. An alcohol gave Lucas test in about 15 minutes. When the alcohol was treated with hot concentrated H_2SO_4 it gave an alkene of molecular formula C_4H_8 which on ozonolysis gave C_2H_4O. The structure of alcohol is :

(A) $CH_3CHOHCH_2CH_3$ **(B)** $CH_3CH_2CH_2CH_2OH$

(C) $CH_3CHOHCH_2CH_2CH_3$ **(D)** $(CH_3)_3C-OH$

67. 

Sum of number of alcoholic groups in product (P) and (Q) is :

(A) 1 **(B)** 2 **(C)** 3 **(4)** 5

68. Thiols are alcohol analogs in which the oxygen has been replaced by sulphur (e.g. CH_3SH). Given the fact that the $S-H$ bond is less polar than the $O-H$ bond, which of the following statements comparing thiols and alcohols is correct ?

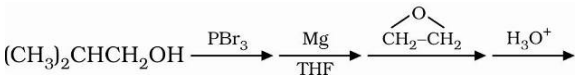
(A) Hydrogen bonding forces would be the same

(B) Hydrogen bonding forces are stronger in thiols

(C) Hydrogen bonding forces are weaker in thiols

(D) No comparison can be made without additional information

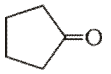
69. What is the major organic product of the following sequence of reactions ?



(A) $(CH_3)_2CH\underset{\displaystyle OH}{\underset{|}{C}}HCH_2CH_3$ **(B)** $(CH_3)_2CHCH_2\underset{\displaystyle OH}{\underset{|}{C}}HCH_3$

(C) $(CH_3)_2CHCH_2CH_2OH$ **(D)** $(CH_3)_2CHCH_2CH_2CH_2OH$

***70.** An organic compound B is formed by the reaction of ethyl magnesium iodide (CH_3CH_2MgI) with a substance A, followed by treatment with dilute aqueous acid. Compound B does not react with PCC or PDC in dichloromethane. Which of the following can be possible structures of A ?

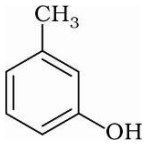
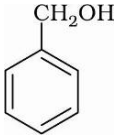
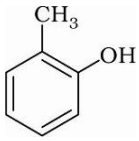
(A) $CH_3\overset{\displaystyle O}{\overset{||}{C}}H$ **(B)** $H_2C=O$ **(C)**  **(D)** $CH_3CH_2\overset{\displaystyle O}{\overset{||}{C}}CH_3$

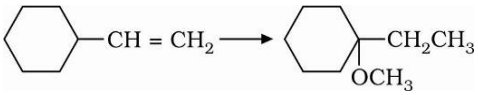
71. $CH_3CH=CH_2 \xrightarrow{X} \xrightarrow{Y} CH_3CH_2CHO$. X and Y are respectively :

(A) H_3O^+, MnO_4^-/H^+ **(B)** H_3O^+, PCC/CH_2Cl_2

(C) $BH_3\cdot THF/H_2O_2$, OH^-, H_2CrO_4 **(D)** $BH_3\cdot THF/H_2O_2$, OH^-, PCC/CH_2Cl_2

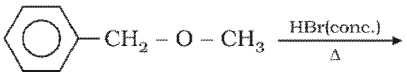
72. The structure of the compound that gives a tribromo derivative on reaction with bromine water is :

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

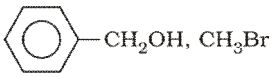
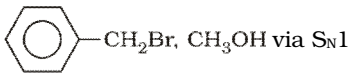
73. Indicate the reagent in the following conversion 

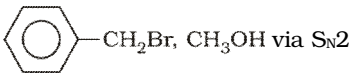
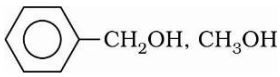
(A) H^+ / CH_3OH **(B)** CH_3ONa

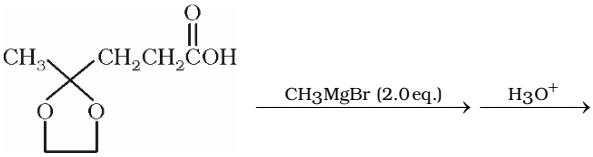
(C) $Hg(OAc)_2$, CH_3OH **(D)** None of these

74. 

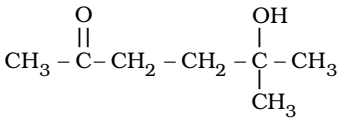
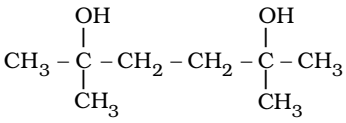
The product are :

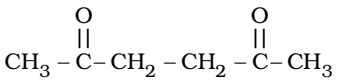
(A)  **(B)** 

(C)  **(D)** 

***75.** 

The products formed in above reaction are :

(A)  **(B)** 

(C)  **(D)** $HOCH_2CH_2OH$