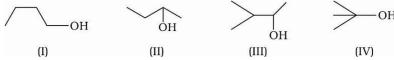


Date Planned ://	Daily Tutorial Sheet-7	Expected Duration : 30 Min
Actual Date of Attempt : / /	Level-2	Exact Duration :

**86.** Dehydration of the alcohols



will be in order:

- (A) IV > II > III > I (B) I > II > III > IV (C) IV > II > III > I (D) II > IV > I > III
- **87.** When *o* or *p*-Phenolsulphonic acid is treated with bromine water, the product formed is :
  - **(A)** 2, 4-Dibromophenol

**(B)** 2, 4, 6-Tribromophenol

(C) 3-Bromophenol

**(D)** 3, 5-Dibromophenol

\*88.  $\bigcirc$  (A) (B) (C) (C) (C) (D) (C) (D)

Identify correct combination:

(A) 
$$(A) = \begin{vmatrix} CH_2 - OH \\ CH_2 - SH \end{vmatrix}$$

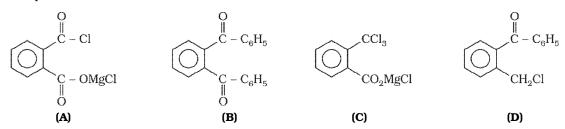
**(B)** 
$$(B) = LiAlH_4 / Ether$$

(C) = 
$$KMnO_4$$

**(D)** 
$$(D) = H_3O^{\oplus}$$

89.  $O \xrightarrow{PCl_5} (A) \xrightarrow{C_6H_5MgCl} Product$ 

The product formed in the above reaction is :



90.  $R - C - O - H + R_1 - OH \xrightarrow{H^+} R - C - O - R_1$ 

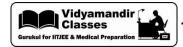
In above esterification reaction, the rate of reaction is maximum, when  $\,R_1$  – OH is :

(A) 1° alcohol

(B) 3° alcohol

(C) 2° alcohol

**(D)** CH<sub>3</sub>OH



## **91.** A and B in the given reaction are:

$$B \xleftarrow{KMnO_4}_{H^+, \Delta} (CH_3)_3 COH \xrightarrow{KMnO_4 / OH^-} A$$

- (A) A and B both are  $(CH_3)_2C = CH_2$
- **(B)** A and B both are  $(CH_3)_2CO + CH_2O$
- (C) A is  $(CH_3)_3COH$  while B is  $(CH_3)_2C = CH_2$  or  $(CH_3)_2CO$
- **(D)** A and B both are  $(CH_3)_3COH$ , i.e., there is no reaction

## \*92. Which of the following statement(s) is(are) true?

- (A) All alcohols are weaker acids than water except methanol
- (B) All alcohols are stronger acid than water
- (C) All alcohols are much weaker acids than terminal alkynes
- (D) All alcohols are stronger acids than terminal alkynes

\*93. 
$$\bigcirc OH \xrightarrow{PBr_3} (X) \xrightarrow{Mg/Et_2O} (Y) \xrightarrow{(i) CH_3 - CH - CHO} (Z)$$

(A) X is -Br

- (B) Y is MgBr
- (D) Z is  $\begin{bmatrix} 1 & CH_3 \\ -C-CH \\ H & O-H \end{bmatrix}$

## \*94. Lucas test is used to make distinction between 1°, 2° and 3° alcohols

$$ROH + HCl \xrightarrow{\quad ZnCl_2 \quad \quad } RCl \downarrow \quad \quad \\ \text{ROH + HCl} \xrightarrow{\quad \text{anhydrous} \quad } RCl \downarrow \quad \quad \\ \text{White turbidity} \quad \quad \\ \text{H}_2Cl \rightarrow \\ \text{H}_3Cl \rightarrow$$

This shows that

- (A) ROH behaves as a base.
- (B) greater the value of  $pK_a$  (alcohol), greater the reactivity with conc. HCl and thus sooner the formation of white turbidity.
- (C) alcohol which reacts fastest with Na metal, will give turbidity at fastest rate.
- **(D)** alcohol which gives red colour during Victor Meyer test, will always give turbidity at slower rate than those giving blue or white colour during Victor Meyer test.

Which of the following are possible products in the above reaction?

