

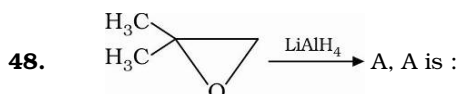
Date Planned : __ / __ / __	Daily Tutorial Sheet-4	Expected Duration : 30 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration : _____

46. One mole of an organic compound A with the formula C_3H_8O reacts completely with two moles of HI to form X and Y. When Y is boiled with aqueous alkali, it forms Z. Z gives the iodoform test. The compound A is :

(A) Propan-2-ol (B) Propan-1-ol (C) Ethoxyethane (D) Methoxyethane

47. *Tert*-butyl methyl ether on heating with hot conc. HI gives :

(A) $CH_3OH + (CH_3)_3CCl$ (B) $CH_3I + (CH_3)_3COH$
 (C) $CH_3I + (CH_3)_3CCl$ (D) $CH_3OH + (CH_3)_3C-I$

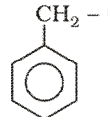
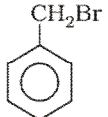


(A) $CH_3CH(CH_3)CH_2OH$ (B) $CH_3CH_2CH_2CH_2OH$
 (C) $CH_3C(CH_3)_2OH$ (D) No reaction

49. To prepare phenyl *t*-butyl ether, best synthesis is :

(A)  + $(CH_3)_3C-Cl$ (B)  + $(CH_3)_3CONa$
 (C) $CH_2=C(CH_3)_2 \xrightarrow[\text{Ph-OH}]{Hg(OAc)_2} \xrightarrow{NaBH_4}$ (D) None of the above is suitable

50. Which of the following paths will provide a better synthesis of ether ?

I.  + $CH_3CH(Br)CH_2CH_3 \longrightarrow$ II.  + $CH_3CH(O^-)CH_2CH_3 \longrightarrow$
 (A) I (B) II
 (C) Of equal importance (D) None of these

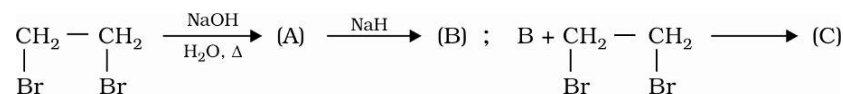
51. Glycerol reacts with potassium bisulphate to produce :

(A) allyl iodide (B) allyl sulphate
 (C) acryl aldehyde (D) glycerol trisulphate

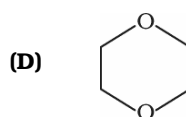
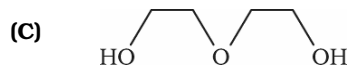
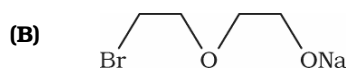
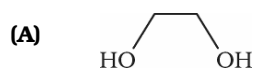
52. The product formed when glycerol reacts with PCl_5 is:

(A) 1, 2, 3-trichloropropane (B) glycerol monochlorohydrin
 (C) glycerol dichlorohydrin (D) All of these

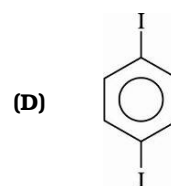
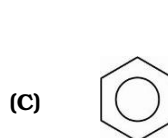
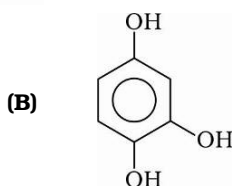
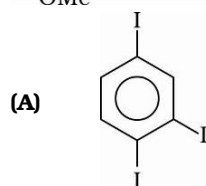
53. Consider the following reactions



The product (C) is:

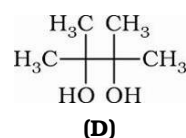
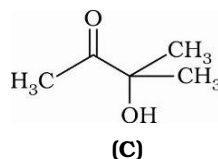
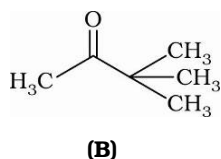
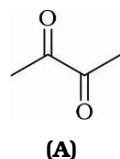


54. $\xrightarrow{\text{HI(excess)}}$ P. P is :

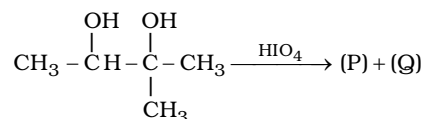


55. $\xrightarrow[\text{(ii) HOH}]{\text{(i) Mg/Hg}} (\text{A}) \xrightarrow[\Delta]{\text{H}^+} (\text{B})$.

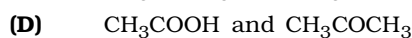
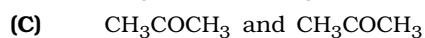
Final product B in above sequence of reaction is :



56. In the given reaction :



(P) and (Q) respectively be :



*57. Which is(are) correct statements ?

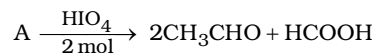
(A) Oxidation product of 1, 2-Ethanediol with HIO_4 is formaldehyde

(B) 1° alcohol turns $\text{K}_2\text{Cr}_2\text{O}_7 / \text{H}^+$ solution green

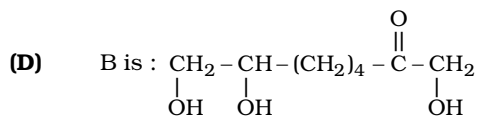
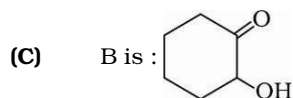
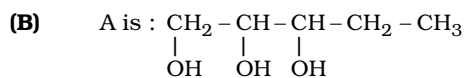
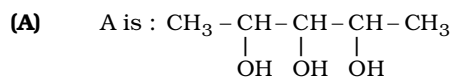
(C) t-Butyl alcohol is converted to isobutene on heating with Cu

(D) CH_3OH is also called wood spirit

*58. Identify A and B.



The correct options are :



59. In which of the following reaction, the product is an ether ?

