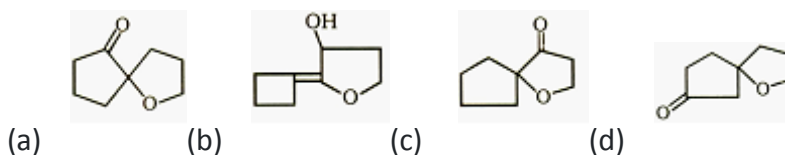
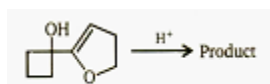


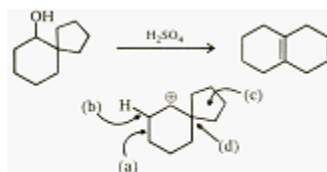


1.1 Identify the major product,



Ans. a

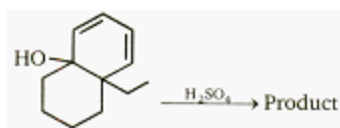
1.2 The following transformation involves a carbocation rearrangement. The carbocation is generated by the protonation of the hydroxyl group, followed by the loss of water. Which bond has to migrate in the carbocation to yield the product in the product indicated (after the deprotonation)?

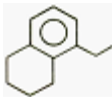

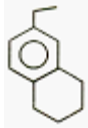


(a) a(b) b(c) c(d)

Ans. c

1.3 Identify the major product.

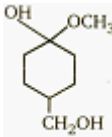
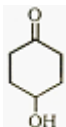
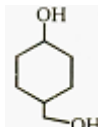
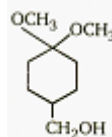


- (a)  (b)  (c)  (d) None of these

Ans. a

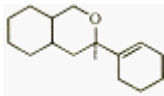
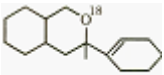
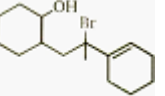
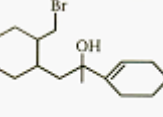


1.4

- (a)  (b)  (c)  (d) 

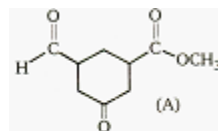
Ans. d

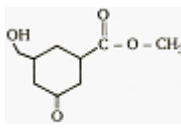
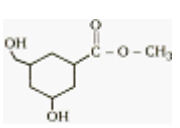
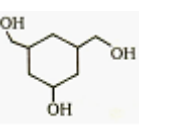
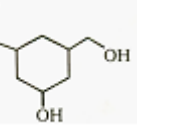
1.5 Major product obtained in the reaction is

- (a)  (b)  (c)  (d) 

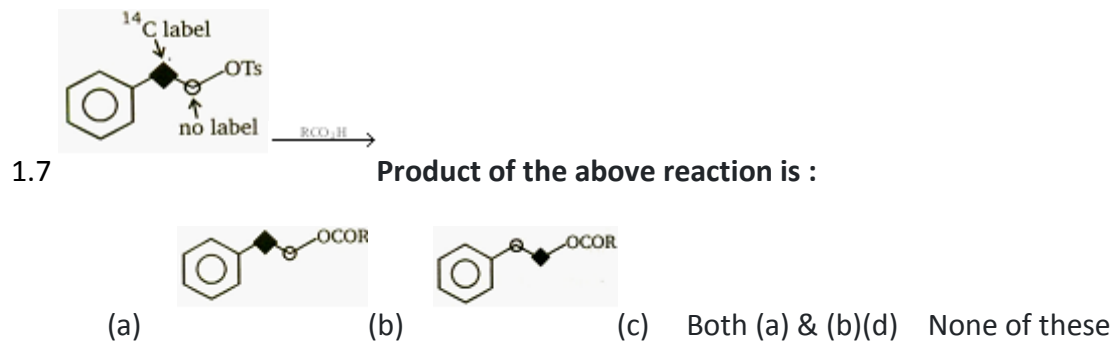
Ans. a

1.6 Predict the product when given compound reacts with LiAlH_4 .

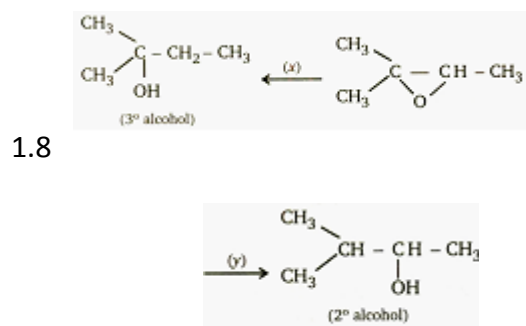


- (a)  (b)  (c)  (d) 

Ans. c



Ans. c

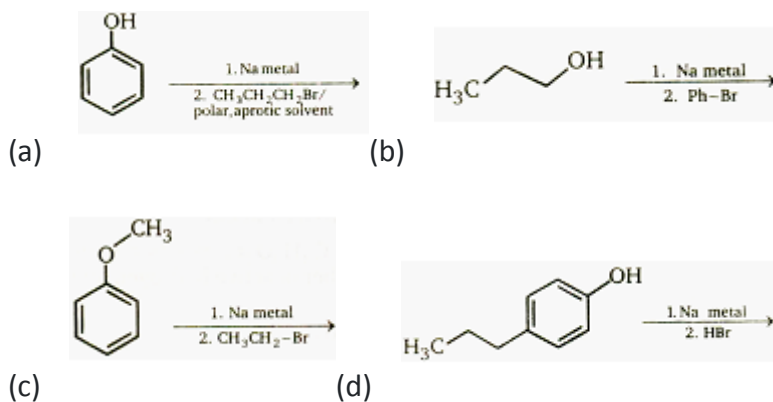


Find missing reagents.

- (a) $x = \text{LiAlH}_4$, $y = \text{NaBH}_4$ (b) $x = \text{LiAlH}_4/\text{AlCl}_3$, $y = \text{LiAlH}_4$
- (c) $x = \text{LiAlH}_4$, $y = \text{LiAlH}_4/\text{AlCl}_3$ (d) $x = \text{H}_2/\text{Ni}$, $y = \text{H}_2/\text{Pt}$

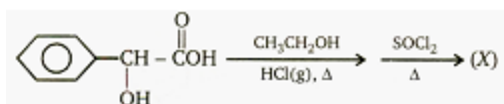
Ans. c

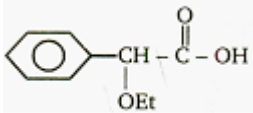
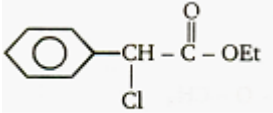
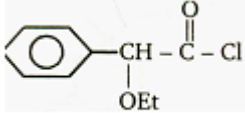
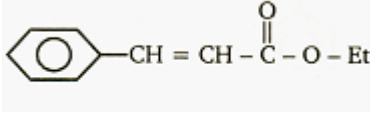
1.9 Choose the best synthesis of phenyl n-propyl ether.



Ans. a


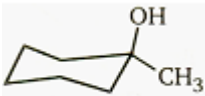


1.10 Assign the structure of major product (X) of the reaction given below.



- (a) 
- (b) 
- (c) 
- (d) 

Ans. b

1.11 Which of the following react with HBr at faster rate?

- (a) 
- (b) 
- (c) 
- (d) 

Ans. b

1.12 Phenol can be distinguished from ethanol by the reactions with-

a) Br_2/water b) Na c) Neutral FeCl_3 d) All the above

Ans. c

1.13 Which of the following reagents can be used to oxidise primary alcohols to aldehydes?

a) CrO_3 in anhydrous medium b) KMnO_4 in acidic medium
c) Pyridiniumchlorochromate d) Heat in the presence of Cu at 573K

Ans. c

1.14 Which of the following is most acidic?

a) Benzyl alcohol b) Cyclohexanol c) Phenol d) m-Chlorophenol

Ans. a

1.15 Ethyl chloride can be converted into ethanol acid by-

a) Hydrogenation **b)** Hydration **c)** Substitution **d)** Fermentation

Ans. c

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