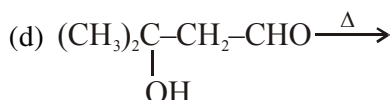
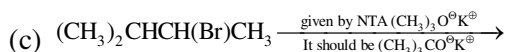


ALCOHOL & ETHER

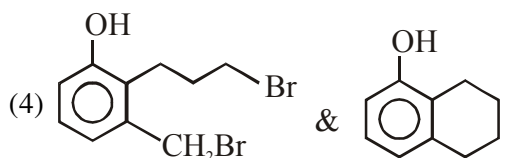
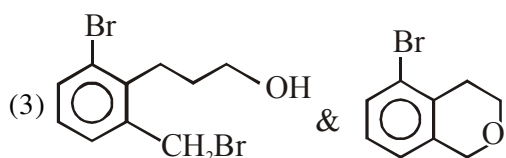
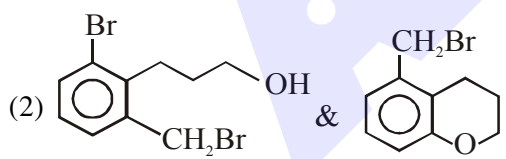
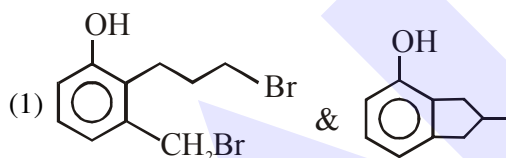
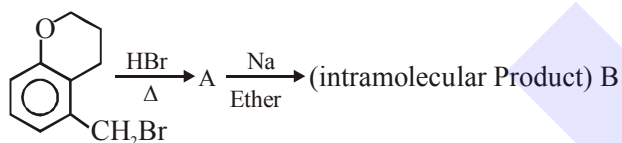
1. Consider the following reactions :



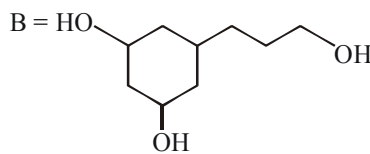
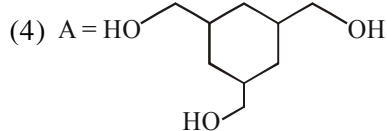
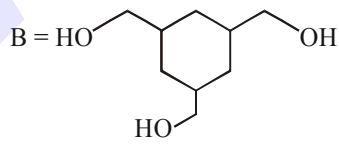
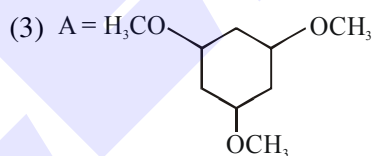
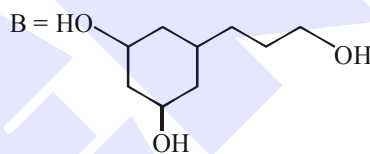
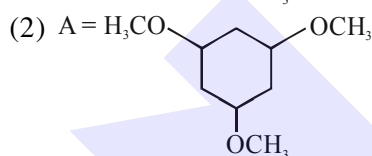
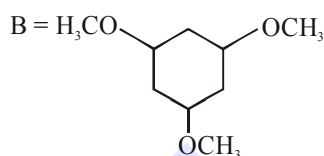
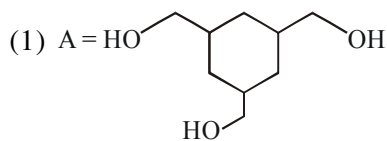
Which of these reaction(s) will not produce Saytzeff product ?

- (1) (c) only
- (2) (a), (c) and (d)
- (3) (d) only
- (4) (b) and (d)

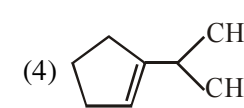
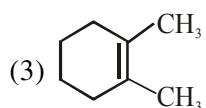
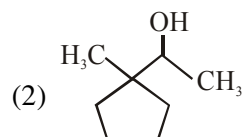
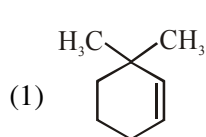
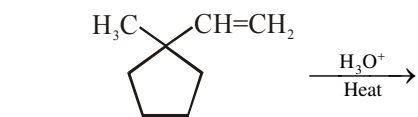
2. In the following reaction sequence, structures of A and B, respectively will be :



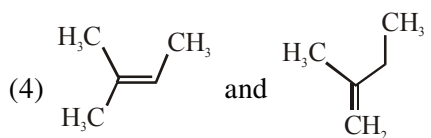
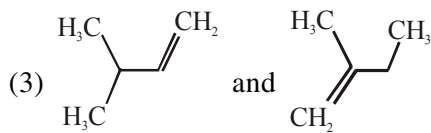
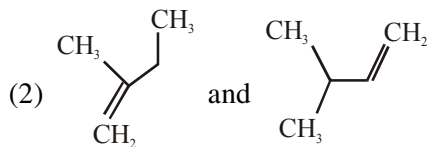
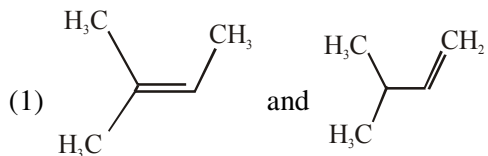
3. Among the compounds A and B with molecular formula $\text{C}_9\text{H}_{18}\text{O}_3$, A is having higher boiling point than B. The possible structures of A and B are :



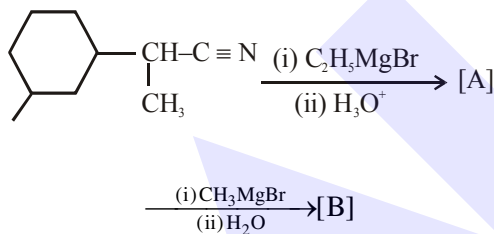
4. The major product in the following reaction is :



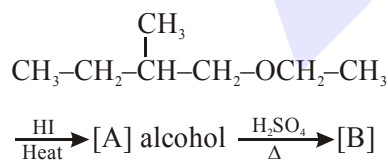
5. When neopentyl alcohol is heated with an acid, it slowly converted into an 85 : 15 mixture of alkenes A and B, respectively. What are these alkenes ?


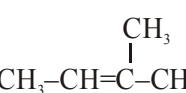


6. The number of chiral centres present in [B] is _____.

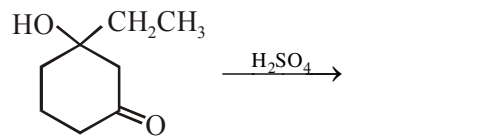


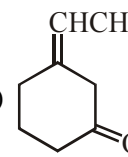
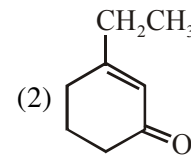
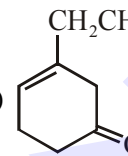
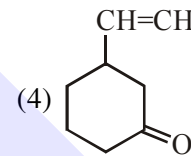
7. The major product [B] in the following reactions is :-



- (1) 
- (2) $\text{CH}_3-\text{CH}_2-\text{CH}=\text{CH}-\text{CH}_3$
- (3) $\text{CH}_2=\text{CH}_2$
- (4) 

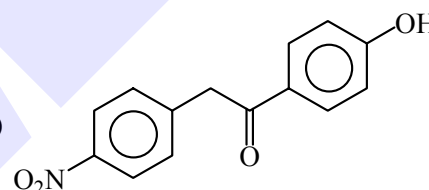
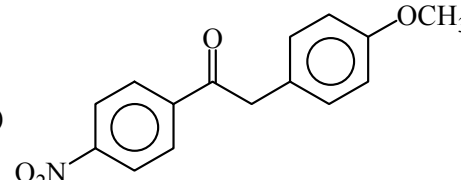
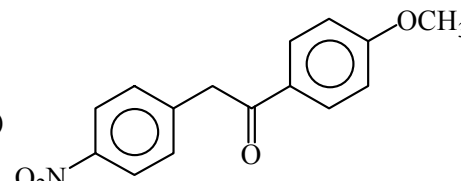
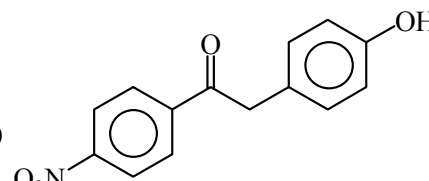
8. The major product of the following reaction is:



- (1) 
- (2) 
- (3) 
- (4) 

9. The major product obtained from the following reaction is -

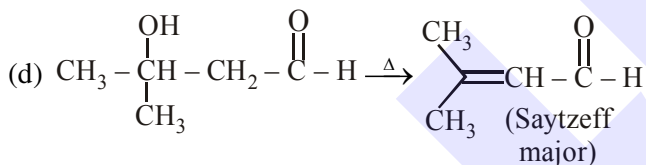
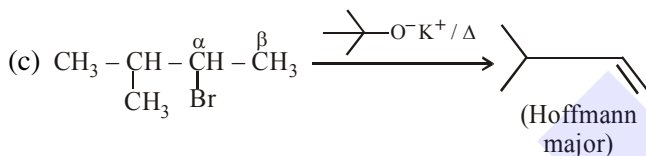
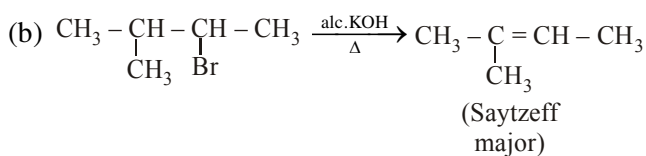
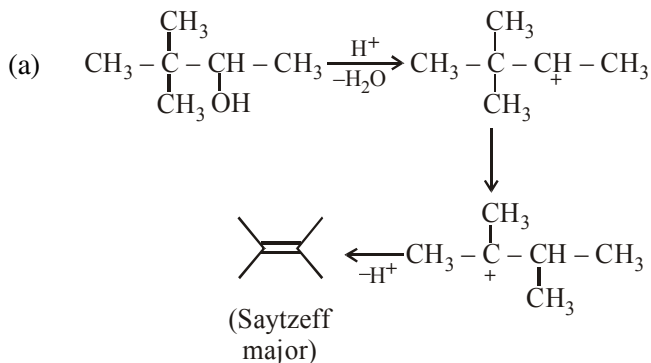


- (1) 
- (2) 
- (3) 
- (4) 

SOLUTION

1. NTA Ans. (1)

Sol.

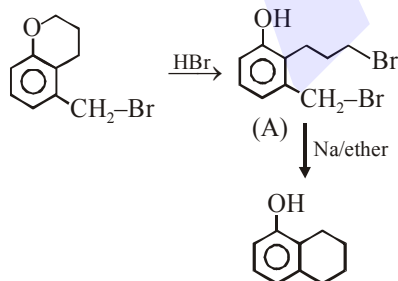


(CH₃)₃O⁻K⁺ is incorrect representation of potassium tert-butoxide [(CH₃)₃CO⁻K⁺].

So it is possible that it can be given as **Bonus**

2. NTA Ans. (4)

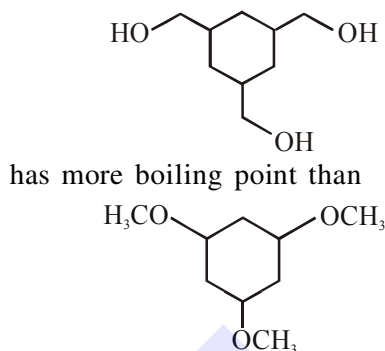
Sol.



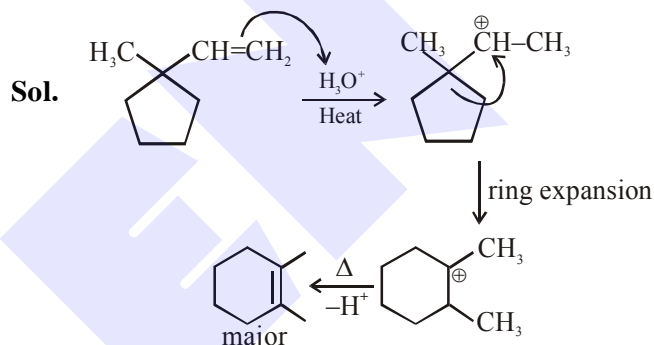
3. NTA Ans. (1)

Sol. Alcohol has more boiling point than ether (due to hydrogen bonding).

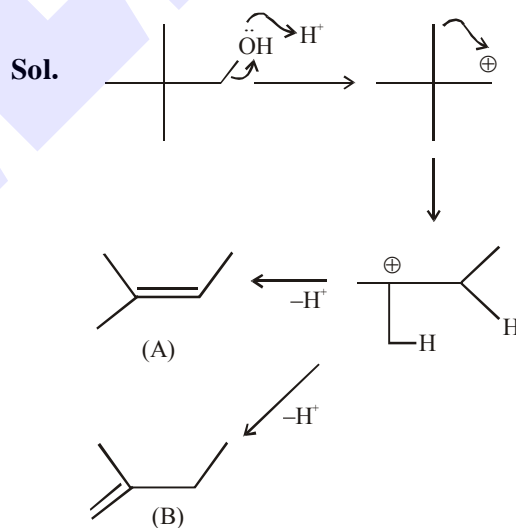
So,



4. Official Ans. by NTA (3)

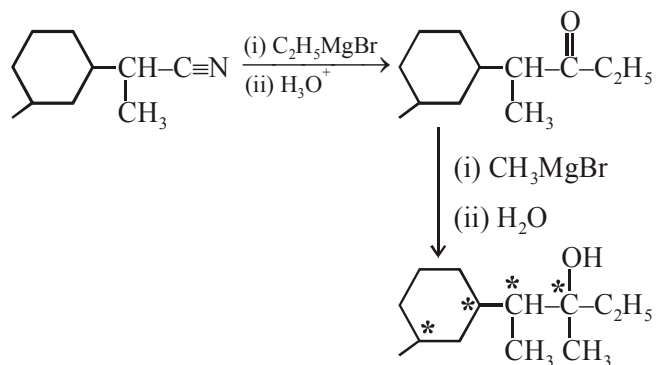


5. Official Ans. by NTA (4)



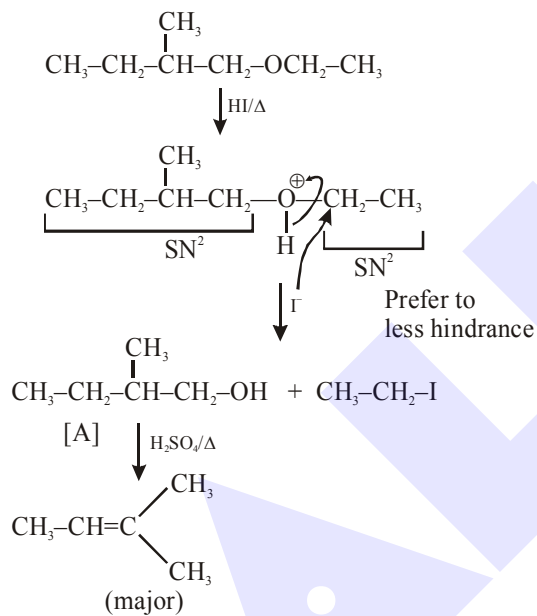
6. Official Ans. by NTA (4)

Sol.



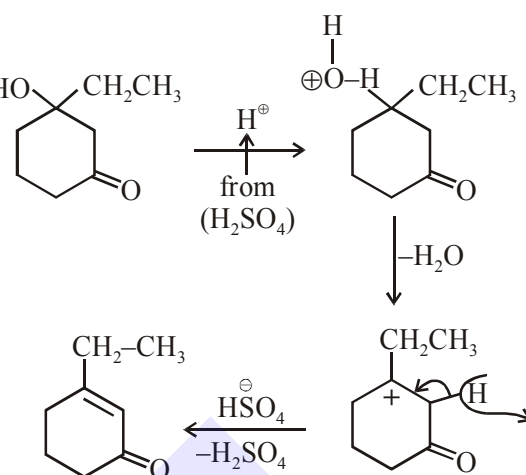
7. Official Ans. by NTA (4)

Sol.



8. Official Ans. by NTA (2)

Sol.



9. Official Ans. by NTA (3)