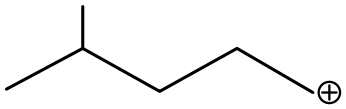
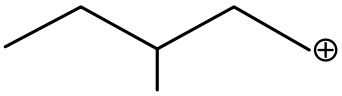
DPP-02

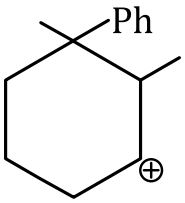
1. Which of the following pair contains electrophile & nucleophile respectively?

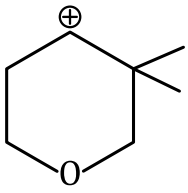
(A) $(NaOH, NH_3)$ (B) $(AlCl_3, CH_3^{\oplus})$ (C) $(Br_2, Cl^{\ominus})$ (D) $(Na^{\oplus}, H_2O)$

2. Which of the following cation involves two times hydride shift?

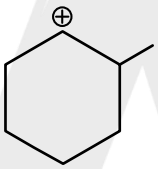
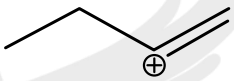
(A) 

(B) 

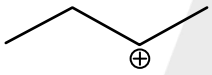
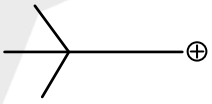
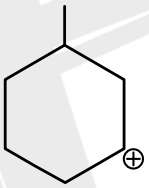
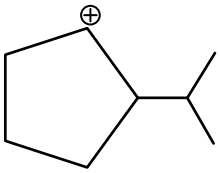
(C) 

(D) 

3. Which of the following cation can rearrange?

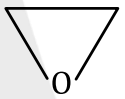
(A) $CH_3 - \overset{\oplus}{C} = O$ (B)  (C)  (D) 

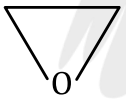
4. Which of the following cation involves rearrangement?

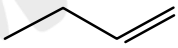
(A)  (B)  (C)  (D) 

5. In which of the following reaction, 1st molecule acts as nucleophile?

(A) $CH_3 - Br + NaOH \longrightarrow$

(B)  $+ AlCl_3 \longrightarrow$

(C)  $+ NH_3 \longrightarrow$

(D)  $+ HBr \longrightarrow$

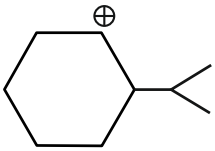
6. Following order of nucleophilicity is correct in:

NaI > NaBr > NaCl > NaF

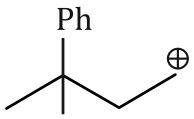
(A) Polar protic solvent (B) Polar aprotic solvent

(C) Non polar solvent (D) All of these

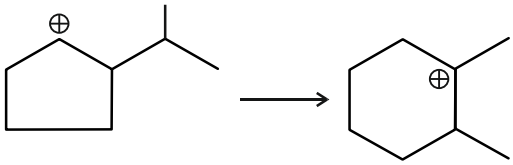
7. How many times cation will rearrange to get maximum stability?



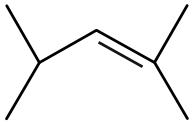
8. How many $\alpha - H$ are present in final maximum stable cation?



9. How many 1,2 -shifts are involved in the following rearrangement of carbocation?



10. Number of alcohols which on H^+/Δ gives following alkene as a major product.



ANSWER KEY

1.	**(C)**	**2.**	**(B)**	**3.**	**(B)**	**4.**	**(B,D)**	**5.**	**(B,D)**	**6.**	**(A,C)**	**7.**	**(2)**
8.	**(4 α – H)**			**9.**	**(4)**	**10.**	**(3)**						