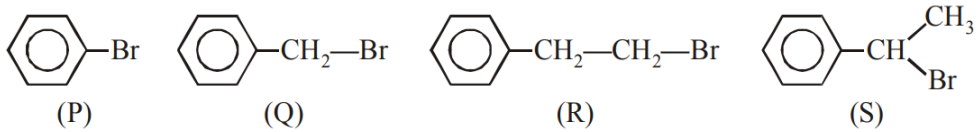
DPP-06

1. Rate of S_N1 reaction is:



(P) (Q) (R) (S)

(A) $S > Q > R > P$ (B) S > R > P > Q (C) P > Q > R > S (D) S > R > Q > P

2. Which one of the following statement is correct about S_N1 reaction

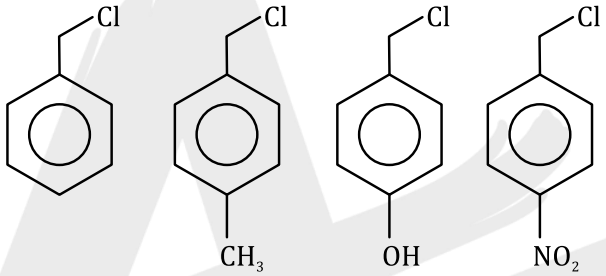
(A) Perfect racemization is observed

(B) Only Walden inversion is observed

(C) Total retention of configuration is observed

(D) Polar protic solvent is preferred

3. Correct order of S_N2 reaction is:

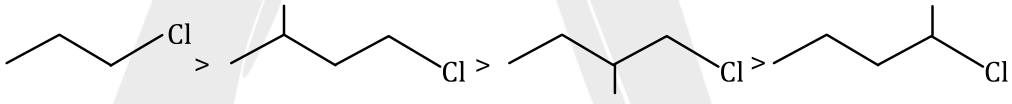


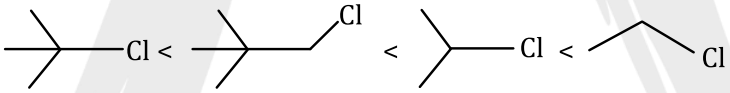
(P) (Q) (R) (S)

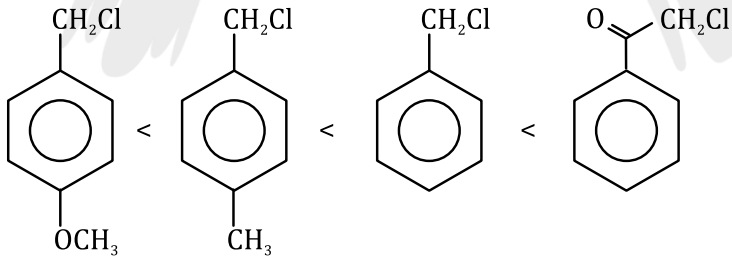
(A) S > P > Q > R (B) R > Q > P > S (C) Q > R > P > S (D) S > Q > P > R

4. Which of the following is correct order towards of S_N2 reaction

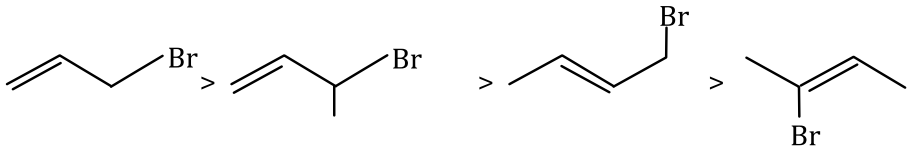
(A) $CH_3Cl > CH_3CH_2Cl > CH_3CH_2CH_2Cl > CH_3-\underset{\displaystyle Cl}{\underset{|}{CH}}-CH_3$

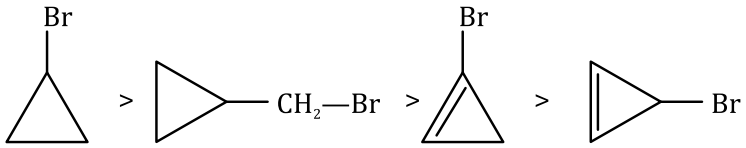
(B) 

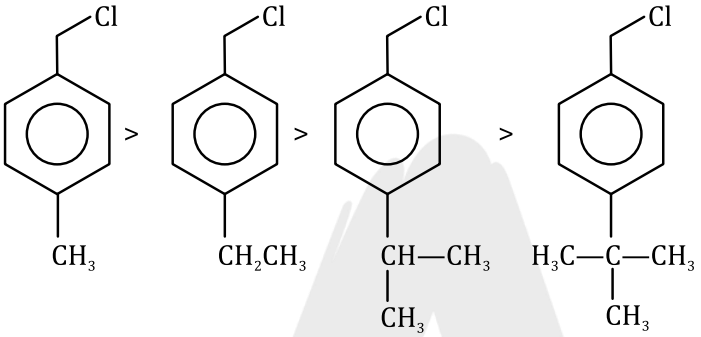
(C) 

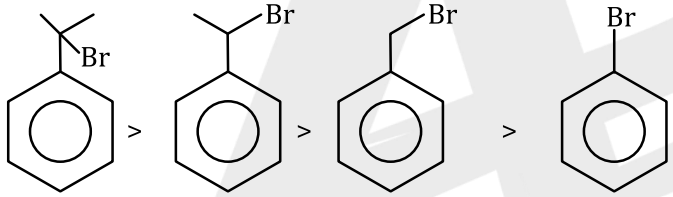
(D) 

5. Whichof the following is correct order towards of S_N1 reaction:

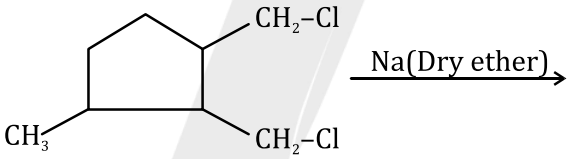
(A) 

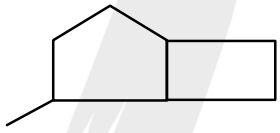
(B) 

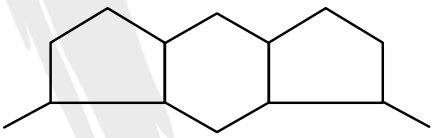
(C) 

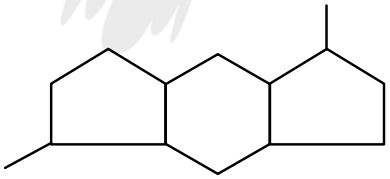
(D) 

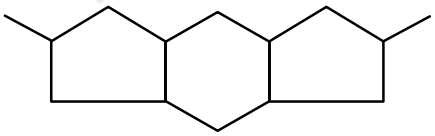
6. Possible products formed during the reaction is/are:



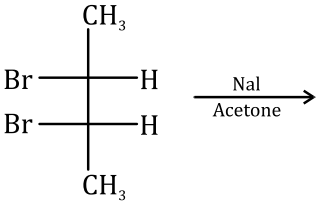
(A) 

(B) 

(C) 

(D) 

7. The correct statement for the given reaction is:



(A) Product is trans-but-2- ene (B) Product is cis-but-2-ene

(C) Product is erythro-2,3-diidobutane (D) Product is threo-2,3- diidobutane

8. **Statement-1:** Wurtz reaction is not a good method to prepare R-R from R-X in which R is a 3° alkyl group. (X≠ –F)

Statement-2: 3° carbocation is formed during the reaction which preferably give alkene.

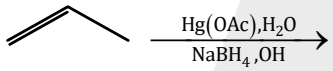
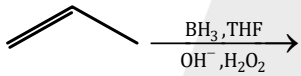
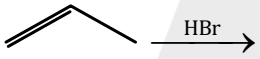
(A) Statement-1 is true, statement-2 is true and statement-2 is correct explanation for statement-1.

(B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.

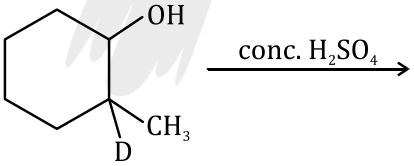
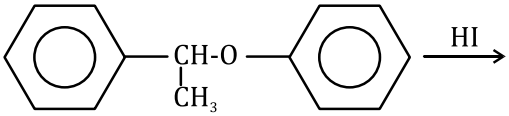
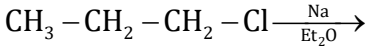
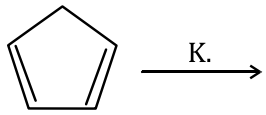
(C) Statement-1 is true, statement-2 is false.

(D) Statement-1 is false, statement-2 is true.

9.

Column I (Reaction)	**Column II (Statements)**
(A) 	(P) Electrophilic addition reaction.
(B) 	(Q) Markovnikoff's orientation is observed.
(C) 	(R) Anti-markovnikoff's orientation is observed
(D) 	(S) Cyclic intermediate is formed as intermediate (T) Carbocation is formed as intermediate

10.

Column I	**Column II**
(A) 	(P) Carbocation formation intermediate
(B) 	(Q) Racemic mixture is formed
(C) 	(R) Aromatic product is formed
(D) 	(S) Free radical found as intermediate (T) Carbanion found as intermediate/product

ANSWER KEY

1.	(A)	**2.**	(D)	**3.**	(A)	**4.**	(ABD)
5.	(CD)	**6.**	(B)	**7.**	(A)	**8.**	(A)
9.	(A)-P, S, Q; (B)-P, S, R; (C)-T, P, Q; (D)-R,			**10.**	(A)-P; (B)-P, Q, R; (C)-S, T; (D)-R, T		