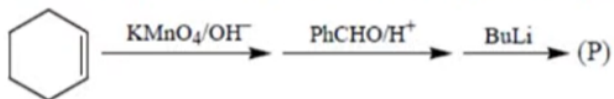
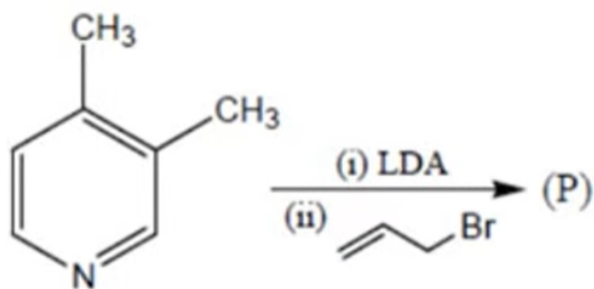


CUET PG 2026 Chemistry Question Paper

1. The major product formed in the following reaction is p



2. The major product P is



3. Match the appropriate geometry on the right with each of the species on the left:

(A) $FXeO(OSO_2F)$

(B) $FXeN(SO_2F)_2$

(C) XeO_3

(D) $XeOF_2$

(i) linear

(ii) pyramidal

(iii) T-shaped

(iv) bent

4. The correct polarity order among the following is?

(a) Boroxine > Borazine > Benzene

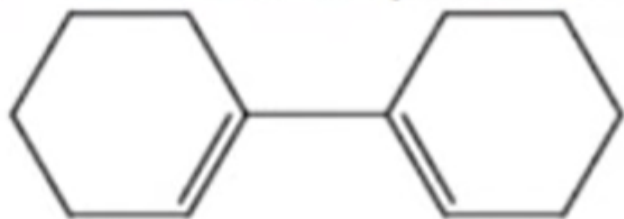
(b) Benzene > Boroxine > Borazine

(c) Benzene > Borazine > Boroxine

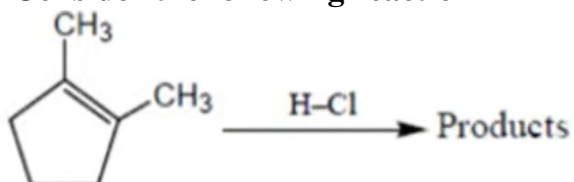
(d) Borazine > Boroxine > Benzene

5. The total number of lone pairs in $XeOF_4$ is

6. In the above compound, the number of 1H NMR signals is



7. Consider the following reaction

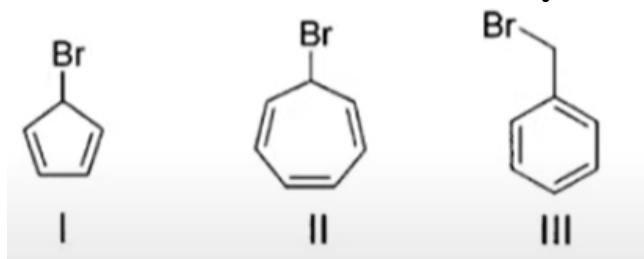


The number of stereoisomer(s) formed during this reaction will be

8. The number of total valence electrons in the following complex is



9. The correct order of rate of solvolysis for the following compounds is



- (I) Cyclopentadienyl bromide
(II) Cycloheptatrienyl bromide
(III) Benzyl bromide
-

10. The following borate $[B_5O_6(OH)_4]^-$ belongs to which of the following class of borates?

- A) Ortho
 - B) Pyro
 - C) peroxo
 - D) Mixed
-

11. Hybridizations of the atoms indicated with the asterisk (*) in the following compounds sequentially are

- (a) sp^2 , sp^2 , sp^3 , sp^2
 - (b) sp^2 , sp^3 , sp^3 , sp^2
 - (c) sp^3 , sp^3 , sp^3 , sp^2
 - (d) sp^2 , sp^2 , sp^3 , sp^3
-

12. The light pink colour of $[Co(H_2O)_6]^{2+}$ and the deep blue colour of $[CoCl_4]^{2-}$ are due to:

- (A) MLCT transition in the first and d-d transition in the second
 - (B) LMCT transition in both
 - (C) d-d transitions in both
 - (D) d-d transition in the first and MLCT transition in the second
-

13. The number of isomers having non-zero dipole moment for PCl_2F_3 in the trigonal bipyramidal geometry is

- (a) 2
 - (b) 3
 - (c) 1
 - (d) 0
-