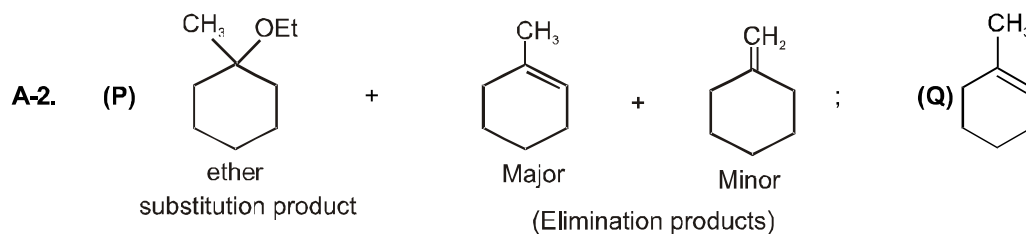


ANSWER KEY

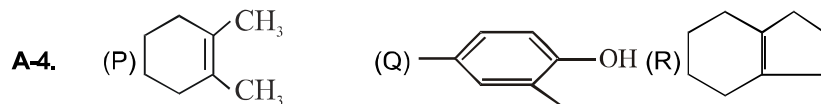
EXERCISE # 1

PART - I

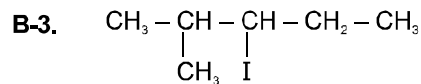
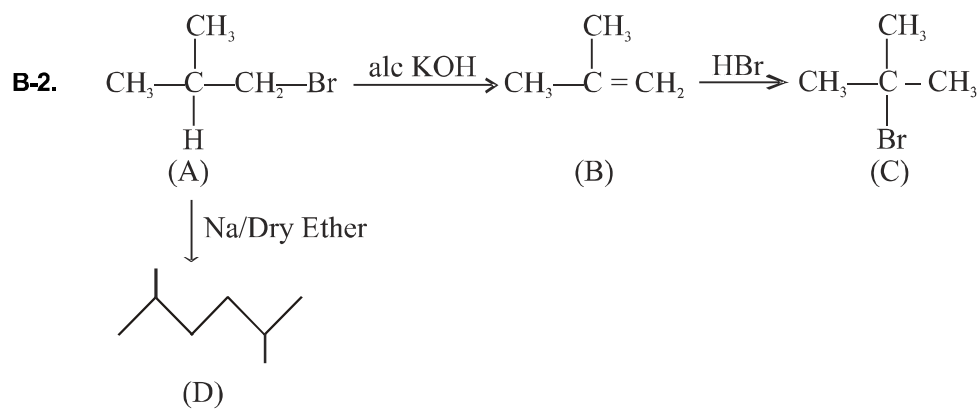
A-1. (P) 3 > 2 > 1 (Q) 3 > 2 > 1 (R) 3 > 2 > 1

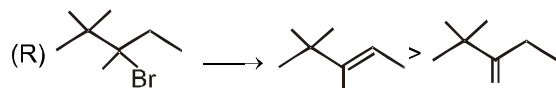
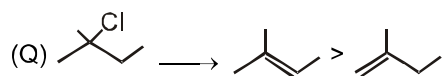
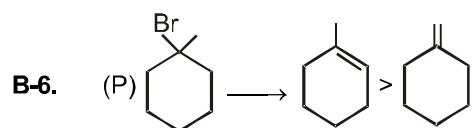
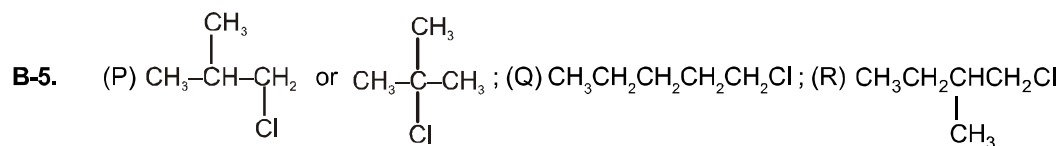
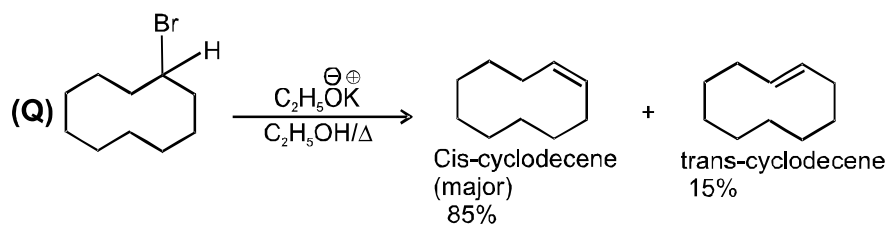
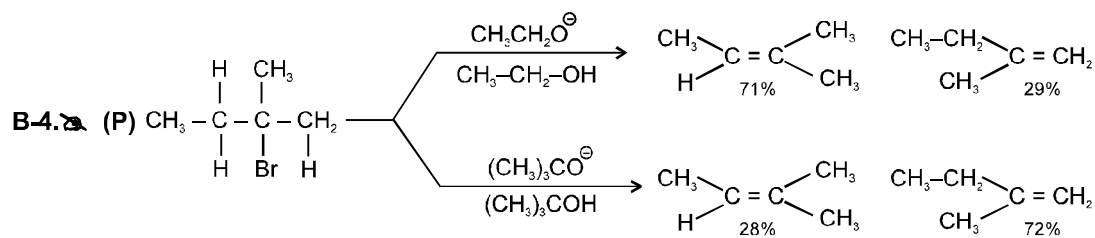


A-3. (P) In basic condition very poor leaving group -OH does not eliminate easily but in acidic medium -OH will be converted into -OH_2^{\oplus} which is very good leaving group.



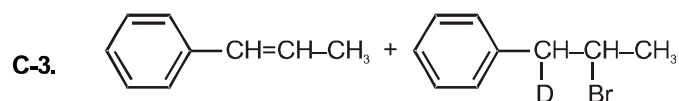
B-1. (P) (ii) > (i) (Q) (i) > (ii) (R) (i) > (ii) (S) (i) > (ii)





C-1. The compound must have significantly acidic β -hydrogen and a relatively poor leaving group.

C-2. In E1cB mechanism carbanion is formed as intermediate and 1st step is reversible.



PART - II

- | | | | | |
|---------------------|---------------------|----------|----------|---------------------|
| A-1. (A) | A-2. (D) | A-2. (B) | A-3. (C) | A-4. (D) |
| A-5. (A) | A-6. (C) | A-7. (B) | A-8. (C) | B-1. (C) |
| B-2. (C) | B-3. (A) | B-4. (C) | B-5. (B) | B-6. (C) |
| B-7. (A) | B-8. (B) | B-9. (A) | C-1. (B) | C-2. (C) |
| C-3. (B) | C-4. (A) | C-5. (B) | | |

PART - III

1. $(A \rightarrow p,r) ; (B \rightarrow q,s) ; (C \rightarrow s) ; (D \rightarrow t)$
2. $(A) - (Q,T) ; (B) - (Q, T) ; (C) - (P, S) ; (D) - (R, S)$
3. $(A) \rightarrow P, R ; (B) \rightarrow P, Q ; (C) \rightarrow P ; (D) \rightarrow P, Q$

EXERCISE # 2

PART - I

- | | | | | |
|-------------------|-------------------|-------------------|--------|---------|
| 1. (D) | 2. (D) | 3. (B) | 4. (C) | 5. (C) |
| 6. (A) | 7. (C) | 8. (A) | 9. (C) | 10. (C) |

PART - II

- | | | | | |
|------|-------|-----------------|------|------------------|
| 1. 6 | 2. 78 | 3. 5 | 4. 6 | 5. 32 |
|------|-------|-----------------|------|------------------|

PART - III

- | | | | | |
|----------------------|---------------------|----------|----------|----------------------|
| 1. (ABCD) | 2. (ABC) | 3. (BCD) | 4. (ABD) | 5. (ABCD) |
| 6. (ABCD) | | | | |