

QUESTION

15. Higher-order (>3) reactions are rare due to:

- (1) shifting of equilibrium towards reactants due to elastic collision
- (2) loss of active species on collision
- (3) low probability of simultaneous collision of all the reacting species
- (4) increase in entropy and activation energy as more molecules are involved.

ANSWER :

Solution:

Higher-order (>3) reactions are rare due to the low probability of simultaneous collision of all the reacting species.

Hence option (3) is the answer.