

### QUESTION:

In the following questions two or more options may be correct.

For a complex reaction \_\_\_\_\_.

- (i) order of an overall reaction is the same as molecularity of the slowest step.
- (ii) order of an overall reaction is less than the molecularity of the slowest step.
- (iii) order of an overall reaction is greater than molecularity of the slowest step.
- (iv) molecularity of the slowest step is never zero or non-integer.

### ANSWER:

The answer is the option (i, iv).

The answer is the option (i) Order of overall reaction is same as the molecularity of slowest step for a complex reaction.

The rate of overall reaction is dependent on total number of molecules involved in slowest step of the reaction making molecularity of the slowest step equal to order of overall reaction.