The IUPAC name(s) of the following compound is (are)

(2017 Adv.)

- (a) 4-methylchlorobenzene
- (b) 4-chlorotoluene
- (c) 1-chloro-4-methylbenzene
- (d) 1-methyl-4-chlorobenzene

Solution:

Since, there is no principal functional groups, numbering of disubstituted benzene is done in alphabetical order as

Hence IUPAC name of this compound is 1-chloro-4-methyl benzene.

Also, toluene is an acceptable name in IUPAC, hence this compound can also be named as 4-chloro toluene.