

In the following questions, a statement of Assertion (A) followed by a statement of Reason (R) is given.

Choose the correct option out of the choices given below each question:

- (a) Assertion and Reason both are correct and Reason is the correct explanation of Assertion.
- (b) Assertion and Reason both are wrong.
- (c) Assertion is correct but Reason is wrong.
- (d) Assertion is wrong but Reason is correct.
- (e) Assertion and Reason both are correct statements but Reason is not the correct explanation of Assertion.

Question 89. Assertion (A): Presence of a nitro group at ortho or para position increases **Reason (R):** Nitro group, being an electron withdrawing group decreases the electron density over the benzene ring.

Solution: (a) Nitro group being electron withdrawing group, decreases the electron density of ring hence increase the reactivity of haloarenes towards nucleophilic substitution.