Identify the compound Y in the following reaction.

(a)
$$CI$$

(b) CI

(c) CI

(d) CI

When a primary aromatic amine, dissolved or suspended in cold aqueous mineral acid and treated with sodium nitrite, a diazonium salt is formed. When this freshly prepared diazonium salt is mixed with cuprous chloride, then diazonium group is replaced by — Cl.

Then chlorobenzene is formed which is y in this reaction.

Hence, option (a) is correct.