

Q25. The negative of the statement "Rajesh or Rajni lived in Bangalore" is

(a) Rajesh lives in Bangalore and Rajni did not live in Bangalore

(b) Rajesh did not live in Bangalore and Rajni did not live in Bangalore

(c) Rajesh did not live in Bangalore or Rajni did not live in Bangalore

Sol: (c) We have, p: Rajesh or Rajni lived in Bangalore.

and q: Rajesh lived in Bangalore.

r: Rajni lived in Bangalore.

$\sim q$: Rajesh did not live in Bangalore.

$\sim r$: Rajni did not live in Bangalore.

$\sim (q \vee r)$: Rajesh did not live in Bangalore and Rajni did not live in Bangalore.