

Relations-and-Functions - Class XI

Related Questions with Solutions

Questions

Question: 01

Let $R = \{(1, 3), (4, 2), (2, 4), (2, 3), (3, 1)\}$ be a relation on the set $A = \{1, 2, 3, 4\}$.

The relation is-

- A. transitive
- B. not symmetric
- C. reflexive
- D. a function

Solutions

Solution: 01

Given $R = \{[1, 3], [4, 2], [2, 4], [2, 3], [3, 1]\}$ be a relation on the set $A = \{1, 2, 3, 4\}$.

[A] Since, $[1, 3] \in R$ and $[3, 1] \in R$ but $[1, 1] \notin R$. So, R is not transitive.

[B] Since, $[2, 3] \in R$ but $[3, 2] \notin R$. So, R is not Symmetric.

[C] Since, $[1, 1], [2, 2], [3, 3], [4, 4] \notin R$. So, R is not reflexive.

[D] Since, $[2, 4] \in R$ and $[2, 3] \in R$ So, R is not a function

Correct Options

Answer:01

Correct Options: B