Distance Vector Routing Table

2

1

5

Z

Y

X

Q) Prepare a Distance vector routing tables for the 3-node network shown below.

Formula:

Dx(y) = min { C(x,v) + Dv(y)}

Dx - source  
 y – destination  
 v – intermediate node

Shortest distance path:

X as a source

X to x = x  
 x to y = x🡪y  
 x to z = x 🡪y🡪z

Y as a source

Y to x = y 🡪x  
 y to y = y   
 y to z = y 🡪z

Z as a source

Z to x = z🡪y🡪x  
 z to y = z🡪y  
 z to z = z

DVR table for xyz:

|  |  |  |  |
| --- | --- | --- | --- |
|  | x | y | z |
| x | 0 | 1 | 3 |
| y | 1 | 0 | 2 |
| z | 3 | 2 | 0 |