

NPTEL

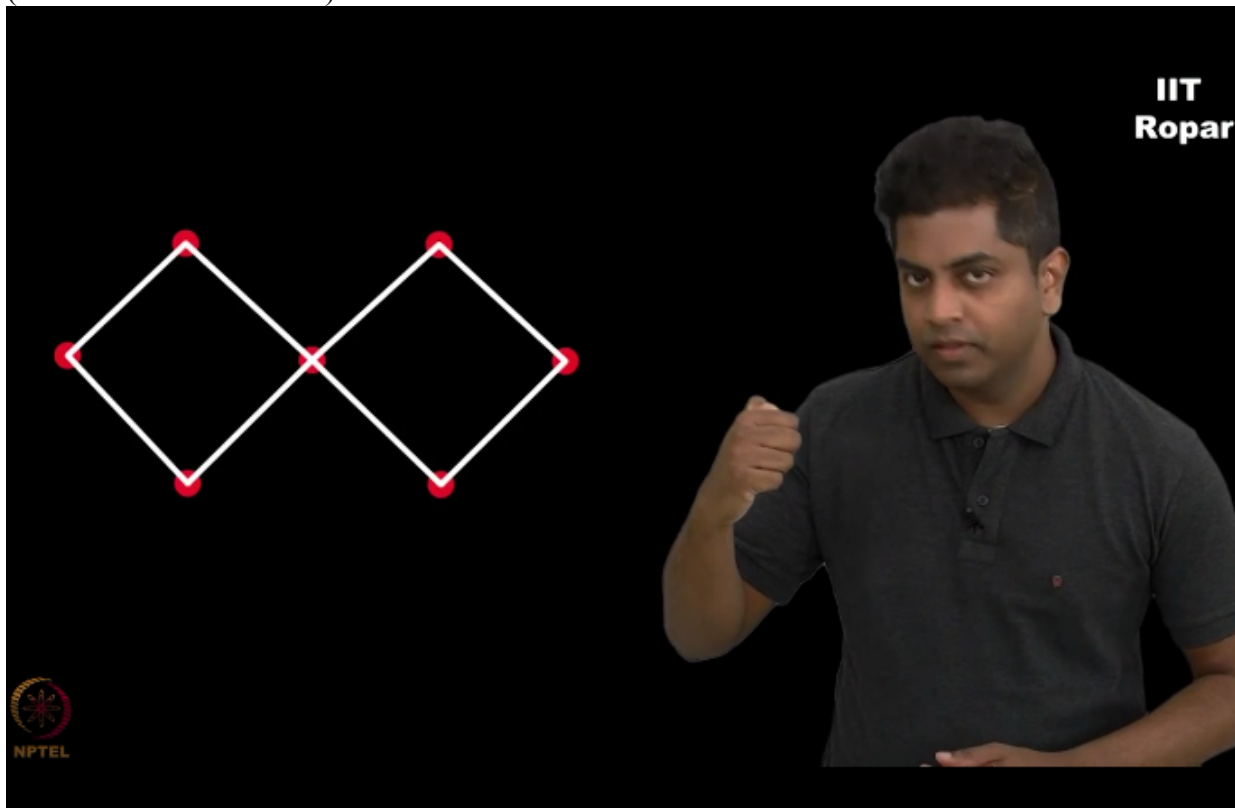
NPTEL ONLINE CERTIFICATION COURSE

**Discrete Mathematics
Graph Theory - 1**

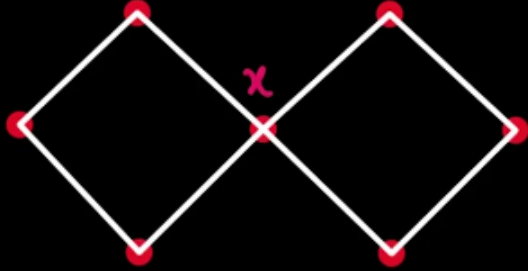
Cut vertex

**By
Prof. S.R.S Iyengar
Department of Computer Science
IIT Ropar**



Look at this graph
(Refer Slide Time: 00:05)




and look at this node X
(Refer Slide Time: 00:11)





IIT
Ropar



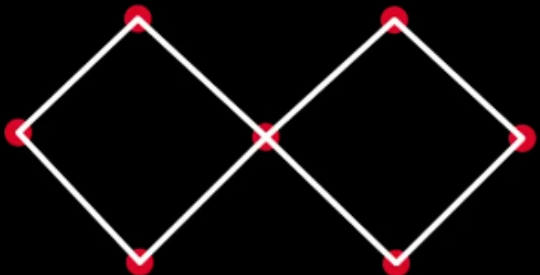
if you were to remove this node X, the graph becomes disconnected,
(Refer Slide Time: 00:13)




IIT
Ropar



which otherwise is connected,
(Refer Slide Time: 00:16)

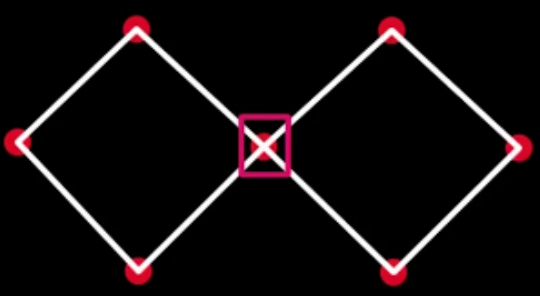


IIT
Ropar




NPTEL

such a vertex is called a cut vertex,
(Refer Slide Time: 00:21)



IIT
Ropar

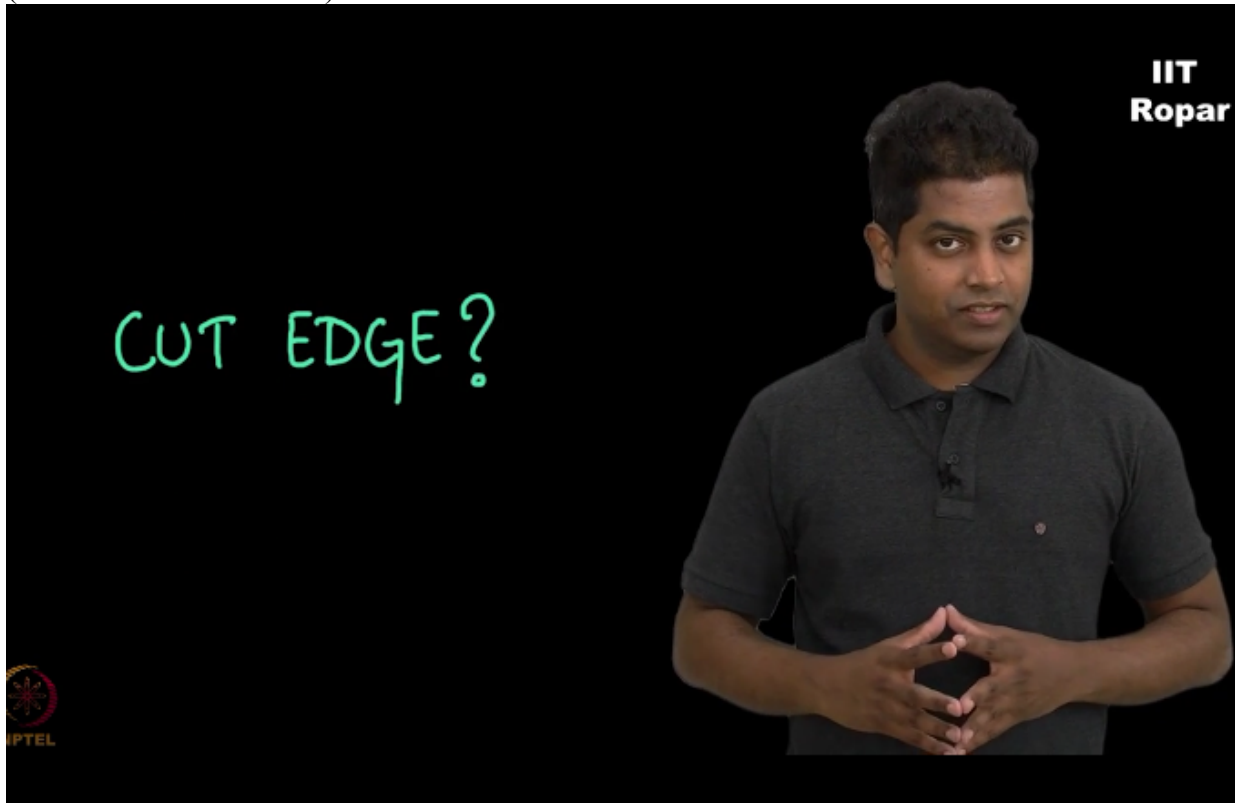


CUT VERTEX

NPTEL

now can you define what could be a cut edge?

(Refer Slide Time: 00:24)



IIT MADRAS PRODUCTION

**Founded by
Department of Higher Education
Ministry of Human Resources Development
Government of India**

www.nptel.iitm.ac.in

Copyrights Reserved