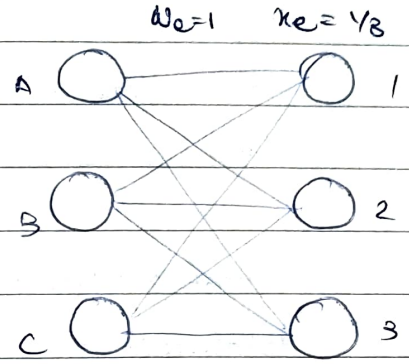
MORE ON LP RELAXATION



$\max \sum w_e x_e$

s.t. $\sum x_e = 1$

for every vertex.

$x_e \in \{0, 1\}$.

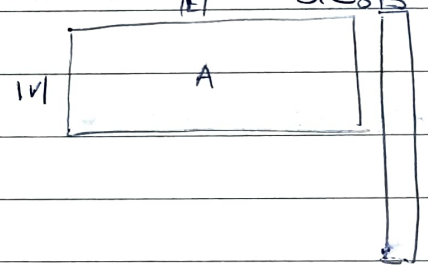
BIA2B

A2C3A

3IC3B

$\max\ c^T x$

$Ax \leq b$

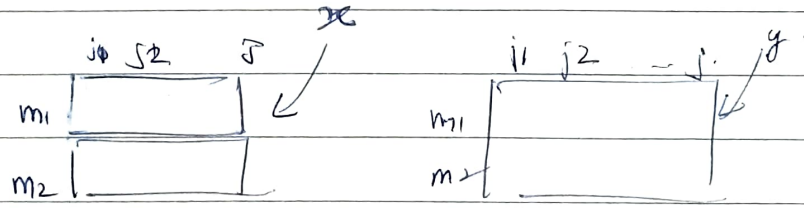


Min. vertex cover

$x_v \in [0, 1]$ (LP-R) $\quad Z_{LP}^*$ $\quad x_v^*$

$S_{LP} = \{ x_v^* \geq k_2 \}$ → vertex cover

(may not be optimal)



64 ja j2 ① (c) ② (a) ③ (a) ④ (b)

⑤ (a) (d).