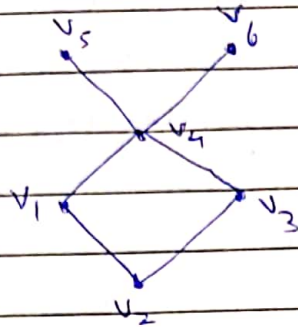
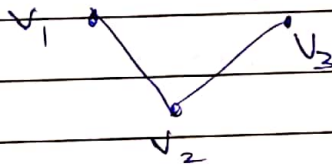


Q4) We take graph  $G$



We note that  $v_4$  is the min-cut vertex.  
On removing  $v_4$  we obtain

$v_5$        $v_6$



$$K(G) = 1, \text{ whereas } K(G - v_4) = 3 > K(G)$$

Hence the statement given is incorrect. ■