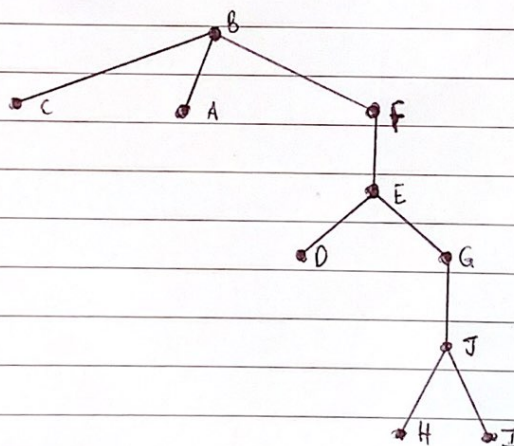


Quiz 4 (DISCRETE STRUCTURE - SEC11013)Question 1

$$I_G = \begin{matrix} & \begin{matrix} e1 & e2 & e3 & e4 & e5 & e6 & e7 \end{matrix} \\ \begin{matrix} A \\ B \\ C \\ D \\ E \\ F \end{matrix} & \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 \\ 0 & 1 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \end{matrix}$$
Question 2

a)



b) The height of the tree is 5

c) vertices that are internal ~~is~~: B, F, E, G and J

d) vertices that are leaves: C, A, D, H and I

e) Preorder: B, C, A, F, E, D, G, J, H, I

Quiz 4 (Discrete Structure - SEC11013)

f) Subtree rooted at G.

