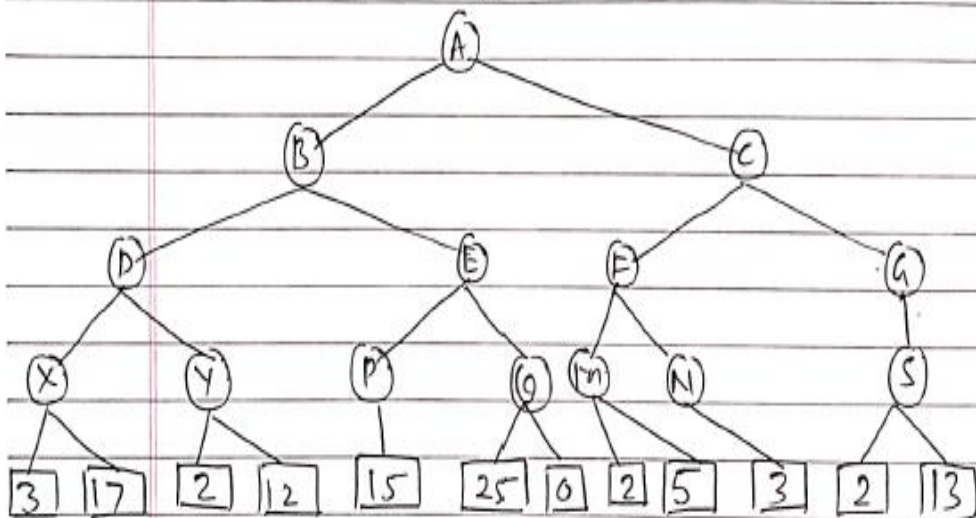


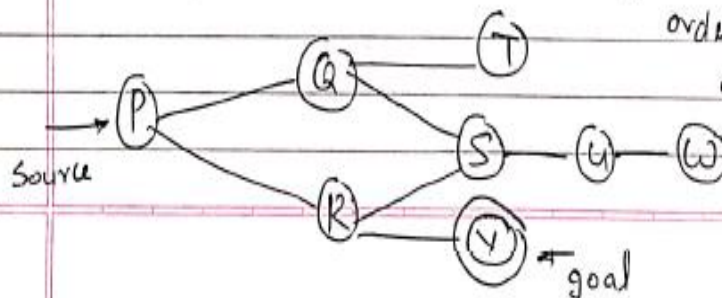
① Solve crypto Arithmetic Problem (5mk)

$$\begin{array}{r} \text{L O G I C} \\ + \text{L O G I C} \\ \hline \text{P R O L O G} \end{array}$$

② Apply α - β pruning on below tree. (5mk)



(5mk) ③ Execute DFS on below tree [Follow alphabetic order in case of clash]



* This is proverb, understand meaning and then convert into FOL.

(4) Convert below sentence to FOL (5mk)

(a) An apple a day keep Dr. away

(b) Any one with 2 or more spouse is a biggamist

(c) Every chicken is hatched from egg

(d) An equilateral triangle has all its sides and angle equivalent.

(e) Some Indian likes temple.

(5) Draw Resolution tree and prove "Manish is not in VIT", example taken in class (5 mark)

(6) Write a plan for "student appearing for MH-CET 2021 engineering entrance exam" using strips language. (5mk)