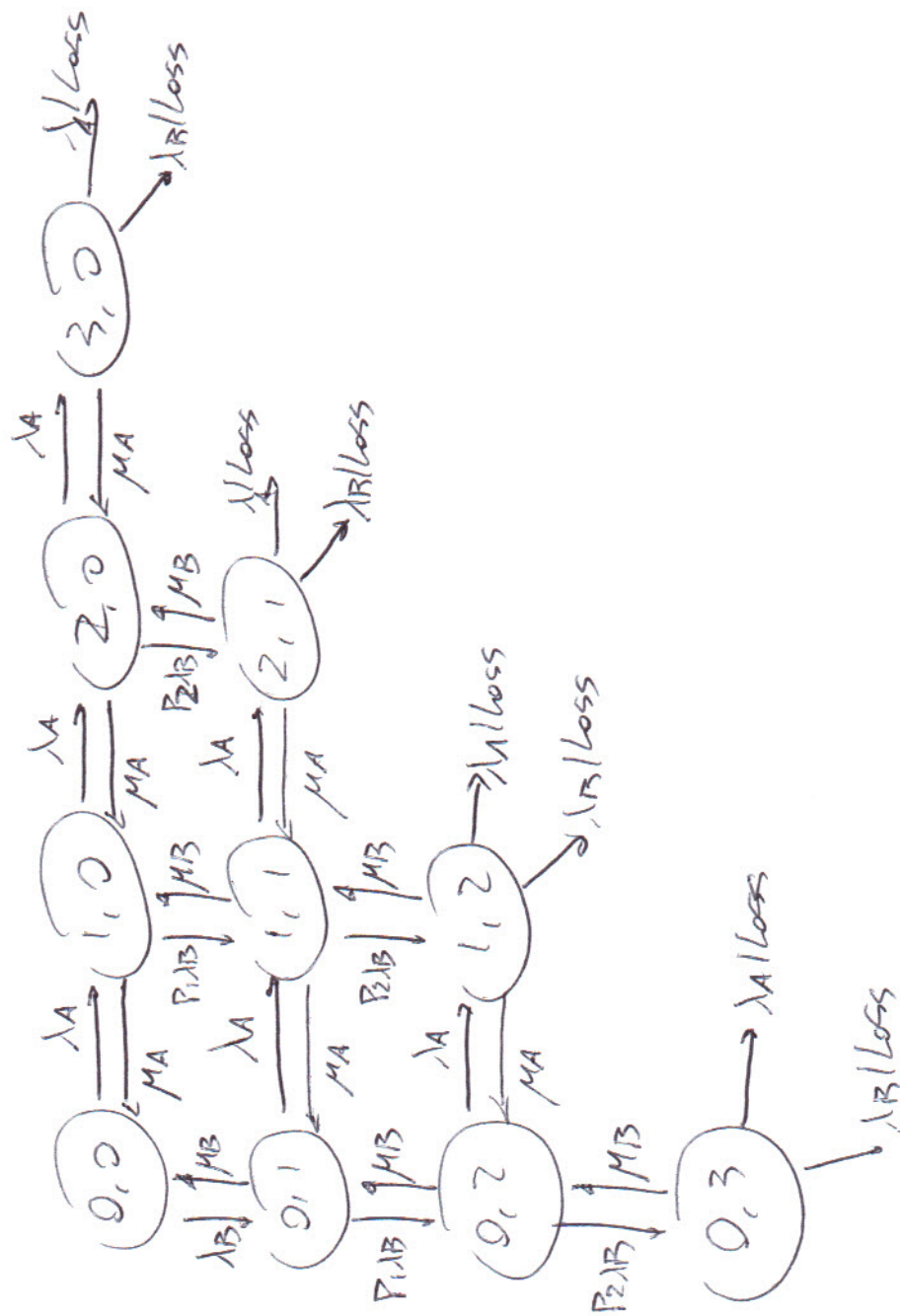


$\zeta_{\text{state}} (\text{Num Utters A, Num Utters B})$
 $\lambda_A = \lambda_B = \frac{1}{2}$
 $P_1 = 0.75$
 $P_2 = 0.5$

①



$$e) \pi_{\text{PERDITA A}} = \frac{\lambda \cdot (\pi_{30} + \pi_{21} + \pi_{12} + \pi_{03})}{\lambda \sum_{i=1}^N \pi_i} = \pi_{30} + \pi_{21} + \pi_{12} + \pi_{03}$$

$$d) \pi_{\text{PERDITA B}} = \frac{\Delta_{BL}}{\Delta_{OFF}}$$

$$\Delta_{BL} = \lambda_B (\pi_{30} + \pi_{21} + \pi_{12} + \pi_{03}) + (1-P_1) \lambda_B (\pi_{10} + \pi_{01}) + \\ + (1-P_2) \lambda_B (\pi_{20} + \pi_{11} + \pi_{02})$$

$$\Delta_{OFF} = \lambda_B \pi_{00} + P_1 \lambda_B (\pi_{10} + \pi_{01}) + P_2 \lambda_B (\pi_{20} + \pi_{11} + \pi_{02}) + \\ + \lambda_B (\pi_{30} + \pi_{21} + \pi_{12} + \pi_{03})$$