

ITM529. Stochastic Processes

Short Quiz 3, 2025F, Weighting of 5%

Name: []

#1. Find P^{100} . [5pt]

$$\mathbf{P} = \begin{pmatrix} 0.2 & 0.8 & 0 & 0 & 0 \\ 0.5 & 0.5 & 0 & 0 & 0 \\ 0 & 0.25 & 0 & 0.75 & 0 \\ 0 & 0 & 0.5 & 0 & 0.5 \\ 0 & 0 & 0 & 0 & 1 \end{pmatrix} \quad (1)$$