

2021-09-07

Questions

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Q1.

Consider the experiment in which we record $M(t)$, the number of active calls at a telephone switch at time t , for each second over an interval of 15 minutes. Determine the state space and the index set of the stochastic process $\{M(t) : t \geq 0\}$

Answer State space = $\{0, 1, 2, \dots, 900\}$
Index set = $\{0, 1, 2, \dots\}$