

Question 44

Give an example, from your own experience, of

- (a) events occurring in discrete time that could reasonably be modelled as a Bernoulli process and give a rough estimate of any parameters; *light bulbs fail, days*
 $1/100$
- (b) events occurring in discrete time where a Bernoulli model would be inadequate, and a Markov chain model might be better and give a rough estimate of any parameters; *The number of days*
- (c) events occurring in continuous time that might reasonably be modelled by a Poisson process, and provide an estimate of the Poisson rate.

[6]

~~light bulbs fail~~

[END OF QUESTION PAPER]