Poisson Q2 [Practice/E] (12/6/21)

What are the (main) conditions for a Poisson model to be appropriate?

Solution

(i) Events are random and occur independently of each other.

[This is normally treated as a single point, for exam purposes.]

(ii) Events occur at a uniform rate over the specified period.

[Not to be confused with the issue of λ being (unwisely) based on non-homogeneous data (involving different rates).]

(iii) If sample data are available, then the sample mean and variance should be close.