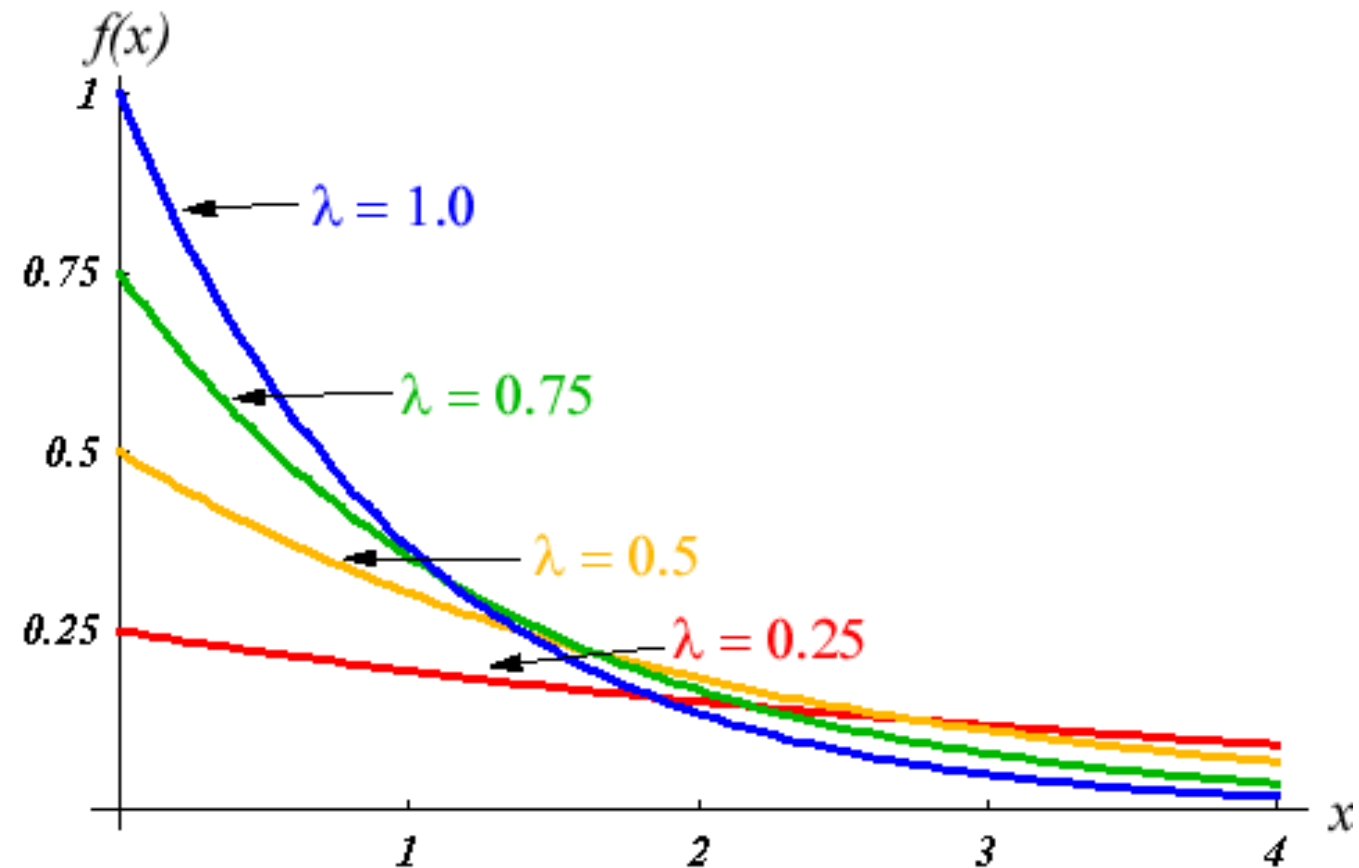


Probability Density Function (PDF)

- **Probability density function (PDF):** depicting changes of the probability of failure up to a given time t



Exponential PDF:

- A common form of PDF is exponential distribution

$$f(t) = \begin{cases} \lambda e^{-\lambda t} & t \geq 0 \\ 0 & t < 0 \end{cases}$$