**Problem Set 3**

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**Prob 2)**

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**i.e. Rate is same.**

**T~=5 for the values below**

**Plot for alpha=0.1, beta=0.5, lambda=10, mu=0.05, and num\_ensemble=1**

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**Plot of the steady-state probability distribution for a larger ensemble**

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**Plot of the steady-state probability distribution VS Poisson**

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Figure 1: alpha =16\* beta

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Figure 2: alpha = 2 \* beta

**Plot of the steady-state probability distribution VS negative binomial**

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