**ECOM90024**

**Forecasting in Economics and Business**

**Tutorial 2 Questions**

1. Let and be independent discrete random variables. Using an appropriate mathematical derivation, show that:
2. Let and be independent uniform random variables defined on the interval [0,1]. Let . Compute the following:
4. Download and import the nominal GDP time series data for the United States contained in USGDP.csv and perform the following tasks in R:
5. Generate an appropriate plot of the data and describe, using words, the time series features that are most apparent to you.
6. Estimate an exponential trend model and plot the fitted values along with the original data.
7. Using your estimated results, compute and plot point forecasts for the next 8 quarters ahead along with your original data.