Functional Mathematics

Task 4 – **Statistics**

Due date:

1. The following data points represent the number of teaching staff at 11 different schools:
   15, 29, 31, 23, 34, 31, 25, 27, 16, 34, 32
   Find the mean, median, mode, range and Inter-Quartile Range of the dataset?

   [3 marks]

2. Imagine a standard pack of playing cards with all the jokers and picture cards removed. Find the arithmetic mean, variance and standard deviation of the numbers on the cards?

   [3 marks]

3. The following data represents the ages of 30 lottery winners. Construct a stem and leaf plot to represent the data, and find the mean, median and mode?

   38 41 29 33 40 74 66 45 60 55
   25 52 54 61 46 51 59 57 66 62
   32 47 65 50 39 22 35 72 77 49

   [4 marks]

Bonus Task

4. The numbers of years of service for 40 teachers in a town are listed below. Construct a frequency distribution table with a bin size of 5.

   1, 6, 11, 26, 21, 18, 2, 5, 27, 33,
   7, 15, 22, 30, 8, 31, 5, 25, 20, 19,
   4, 9, 19, 34, 3, 16, 23, 31, 10, 4,
   2, 31, 26, 19, 3, 12, 14, 28, 32, 1

   [5 marks]