UNIT 3 FURTHER MATHEMATICS

BOOK 1 – STATISTICS

Course Outline/Assessment
Types of Data

Univariate Analysis
Organising Data
Frequency Tables for a Categorical Variable
Bar Charts
Single Segmented Bar Charts
Frequency Tables for Numerical Data
Histograms
Histograms Using Logarithmic Scales
Significant Figures
Dot Plots
Stem and Leaf Plots
Box Plots
Calculating and Interpreting Summary Statistics

Measures of Centre
Mode
Median
Mean

Measures of Spread
Range
Interquartile Range (IQR)
Standard Deviation
Five Number Summary
Boxplots
Outliers
Describing the Shape of a Distribution
The Normal Distribution
Standard Z-Scores
Samples and Populations
Summary – Measures of Centre and Spread

Bivariate Data
Displaying, Summarising and Describing Relationships in Bivariate Data
Two Categorical Variables
One Categorical and One Numerical Variable
Back-To-Back Stem and Leaf Plots
Parallel Boxplots
Two Numerical Variables
Measuring the Strength and Direction of a Relationship (r value)
Coefficient of Determination
Correlation and Causation
Non-Casual Explanations for Observed Associations

Exam 2 Style Question

BOOK 2 – STATISTICS

RECURSION & FINANCIAL MODELLING

Section 1: Statistics

Section 2: Recursion & Financial Modelling