Actuarial Common Entrance Test (ACET)

Stats Pack

Introduction

Background

Stats Pack has been developed in response to requests from students who have studied very little statistics before in their schooling and for whom Subject CT3 is a significant jump.

Whilst the Subject CT3 Course Notes do cover all that you need to know, it is our experience that some students can find the pace and brevity too much to gain a sufficient grasp of the subject and as a result find themselves at a disadvantage.

Therefore the Stats Pack covers the basic concepts of statistics at a slower pace with plenty of examples and careful explanations of where the results have come from.

Stats Pack is therefore appropriate for students who:

- have never met statistics before
- studied statistics a very long time ago and have forgotten the basics
- are struggling with Subject CT3 due to the pace of the course**.**

SYLLABUS	
	Topic Stats Pack
	Permutations and combinations
1	**Types of data** **Statistical diagrams** bar chart, histogram, dot plot, stem-and-leaf, boxplot **Measures of location** mean, median, mode **Measures of spread** range, interquartile range, standard deviation, variance **Skewness**
2	**Probabilities** basic rules of probabilities **Advanced probabilities** tree diagrams conditional probabilities
3	**Discrete random variables** definitions, probabilities mean, mode, median standard deviation and variance coefficient of skewness **Continuous random variables** definitions, probabilities mean, mode, median standard deviation and variance coefficient of skewness
4	**Discrete distributions** discrete uniform Bernoulli binomial Poisson **Continuous distributions** continuous uniform exponential the normal distribution
5	**Correlation** scatterplots, covariance, correlation coefficient **Regression**