Knowledge, skills and understanding

Content

To prepare students for the final assessment of this qualification, the following content must be covered.

1. Managing Information: The External and Internal Business Environment

Subject content	What students need to learn
	Students will need to apply their knowledge and understanding of the following content in a business context.
1.1 Data collection	a) Planning for data collection
	b) The difference between primary and secondary sources of business data
	c) The difference between a census and a survey and their relative advantages and disadvantages
	d) The need for a pilot survey before conducting a large scale survey
	e) The sample frame and the sampling fraction
	f) The different methods of sampling: • random • systematic • quota
	g) Advantages and disadvantages of the different sampling methods
	h) The role of stratification in sample design
	i) Advantages and disadvantages of the various methods of data collection: • interview • postal questionnaire • email survey
	j) Principles of questionnaire design

Subject content	What students need to learn
1.2 Data Presentation	a) Alternative forms of data including categorical, discrete and continuous
	b) The circumstances in which the various graphs/diagrams/charts should be used
	c) Types of bar chart, pie chart and the Lorenz curve
	d) Interpretation of graphs/diagrams/charts/calculation
1.3 Descriptive statistics	a) Calculations: • the mean, median, mode and quartiles for ungrouped data • the range, quartile deviation, mean deviation and standard deviation for ungrouped data • obtain the median and quartiles from the cumulative frequency curve or by calculation • the mean and standard deviation for grouped data • a coefficient of variation
	b) Diagrams, charts and graphs: • a histogram, dealing with unequal class intervals • a cumulative frequency curve • a box plot using the median and quartiles
	c) Interpretation of the measures of location and dispersion including the coefficient of variation

2. Forecasting for Business Decisions

Subject content	What students need to learn
	Students will need to apply their knowledge and understanding of the following content in a business context.
2.1 Correlation and regression	a) Response and explanatory variables
	b) Scatter diagram, interpreting the relationship shown including the possible presence of outliers

	c) Calculations: • the product moment correlation coefficient • Spearman's rank correlation coefficient • a regression equation
Subject content	What students need to learn
2.2 Time-based data	a) Components of a time series
	b) Calculations: • a suitable moving average to identify the trend • the seasonal factors using the additive model • a weighted index number for price, quantity and cost • Laspeyres and Paasche index numbers including their advantages and disadvantages
	c) Diagrams, charts and graphs: • a time series graph • the trend on the time series graph
	d) Seasonally adjusted values and their uses
	e) Forecasting future values and their accuracy
	f) A national index of retail prices
	g) Change of base year and its effects

3. Risk Management and Business Decision Making

Subject content	What students need to learn
	Students will need to apply their knowledge and understanding of the following content in a business context.
3.1 Probability	a) Uses of probability and its application within a business environment
	b) Probability concepts including mutually exclusive and independent events
	c) The addition and multiplication rules of probability
	d) Presentation of business outcomes including the use of tabulation and Venn and tree diagrams

The following skills should be developed throughout the course of study.

Skills	Students should:
	a) Use statistical techniques in a range of business contexts, including market research, financial data, staffing records and economic information
	b) Collect, present, analyse and interpret results of diagrams, charts and graphs and information in the context of practical business situations
	c) Perform statistical calculations as an aid in solving business problems and making business decisions