

THE INSTITUTE OF COMMERCIAL MANAGEMENT

SUBJECT SYLLABUS



NUMERACY & STATISTICS

28 MARCH 2006

Basic Numeracy:

- Integers & Decimal Fractions
- Directed Numbers
- Powers & Roots
- Factors & Multiples

Using a Calculator:

- Approximations
- Estimation
- Degrees of Accuracy
- The Keys of a Calculator
- Standard Form

Fractions:

- Types of Fraction
- Equivalent Fractions
- Operations Involving Fractions
- The Conversion Between Fractions & Decimal Fractions

Ratio and Proportion:

- Ratio
- Division in a Given Ratio
- Direct Proportion
- Scale Diagrams & Models

Measurement:

- Metric and Imperial Units
- Conversion Between Metric & Imperial Units
- Compound Measures

Percentages:

- Percentages
- Finding a Percentage of an Amount
- Increasing & Decreasing an Amount by a Given Percentage
- Expressing One Quantity as a Percentage of Another

Wages & Salaries:

- Basic Pay
- Overtime Rates
- Commission
- Piecework
- Deductions from Pay

Travel:

- Foreign Currency
- Time
- Timetables

Statistical Terms

Sampling, Surveys, Questionnaires:

- Surveys
- Censuses
- Samples
- Sampling Methods
- Bias
- Questionnaires
- Pilot Surveys
- Hypothesis Testing

Clarification & Tabulation of Data:

- Tabulation
- Classification of Data
- Tally Charts
- Frequency Tables

Statistics on Display:

- Pictorial Representation of Data
- Pictograms
- Bar Charts
- Pie Charts
- Line Graphs
- Frequency Polygons
- Drawing Inferences from Diagrams

Averages & Range:

- The Arithmetic Mean
- The Mode
- The Median
- The Use of Mean, Mode & Median
- The Mean & Median of a Frequency Distribution
- Range
- Cumulative Frequency

Algebra:

- The Basics of Algebra
- Indices
- Equations
- Harder Equations
- Flow Diagrams
- Formulae
- Rearranging Formulae

Graphs:

- Graphs & Curves
- The Interpretation of Graphs
- Graph Plotting
- Conversion Graphs
- Cartesian Coordinates
- Straight Line Graphs
- Gradients & Intercepts

Geometrical Shapes:

- Lines & Angles
- Polygons
- Circles & Angles
- Tessellations
- 2D Representation of 3D Objects

Mensuration:

- Perimeters of Polygons
- Area
- The Circumference and Area of a Circle
- Volume

Time & Travel Graphs:

- Distance-Time Graphs
- Growth & Decay

Pythagoras and Trigonometry:

- Pythagoras' Theorem
- Trigonometrical Ratios
- Bearings
- Angles of Elevation and Depression

Reading List

Main Text:

Application of Number - B Gaultier & L Buchanan (Oxford University Press)