

Knowledge, skills and understanding

Content

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

1 Business ownership

Subject content	What students need to learn
1.1 Terminology and concept	<p>a) Knowledge and understanding of different terminology and concepts in business ownership.</p> <p>Sole trader, partnership, limited company, fixed cost, variable cost, price, ordinary share, preference share, nominal value, par, market value, stock, dividend, redeem, redemption, commission, current and non-current assets, break-even point, output, sales, revenue, contribution, gross profit or loss, net profit or loss, overhead expenses, supply, demand, marginal costs, average costs, revenue maximisation, profit maximisation.</p>
1.2 Revenue and costs	<p>a) Knowledge and understanding of the differences between various costs and assessing their usage.</p> <p>b) Calculation of:</p> <ul style="list-style-type: none"> ● value of fixed costs, variable costs, and total costs ● total revenue based on sales and prices ● gross and net profit in absolute and percentage terms.
1.3 Break-even analysis	<p>a) Knowledge and understanding of break-even analysis and its use in business planning.</p> <p>b) Calculations of:</p> <ul style="list-style-type: none"> ● break-even point in units of production and/or revenue ● level of output to yield a given level of profit ● level of profit at a given level of output ● contribution per unit.
Subject content	What students need to learn

<p>1.4 Presentation of findings</p>	<p>a) Presentation and calculation of findings through graphical means:</p> <ul style="list-style-type: none"> ● graph of costs against output ● break-even chart ● graph of supply and demand ● graph of marginal and/or average costs. <p>Note: Where graphs are curved, knowledge of the equation of the curve will not be expected.</p>
<p>1.5 Comparison</p>	<p>a) Understanding of how to compare projects using a variety of methods.</p>
	<p>b) Comparison of two or more projects with varying fixed and variable costs.</p>
	<p>c) Evaluation of circumstances for choosing one project in preference to others, with reasoning.</p>
	<p>d) Comparison using graphical methods.</p>
<p>1.6 Company shares</p>	<p>a) Knowledge and understanding of company shares, and how profits or losses can be accrued through their purchase or sale.</p>
	<p>b) Calculations relating to ordinary and/or preference shares:</p> <ul style="list-style-type: none"> ● value of a purchase/sale of shares ● associated commission costs ● profit and dividend payments on shares ● percentage yield on an investment ● comparison of competing investments.

2. Profitability and liquidity

Subject content	What students need to learn
2.1 Terminology and concept	a) Knowledge and understanding of different terminology and concepts in profitability and liquidity. Turnover, receivables, payables, working capital, shelf life, inventory turnover, equity, current, non-current, liabilities, bankrupt, secured debt, unsecured debt, dividend, gearing ratio, current ratio, acid-test ratio.
2.2 Ratios to assess profitability and liquidity	a) Knowledge and understanding of different ratios used in business, and how these relate to the health of a business. b) Calculation of: <ul style="list-style-type: none"> ● gross profit percentage ● percentage profit for the year ● expense ratio ● percentage return on capital employed ● working capital (current) ratio ● acid test ratio ● gearing ratio ● trade receivables collection period ● trade payables payment period ● shelf-life and stock turn.
2.3 Statement of financial position (SOFP)	a) Knowledge and understanding of statements of financial position (SOFP), and the calculations that may be performed from figures in a SOFP. b) Calculation of: <ul style="list-style-type: none"> ● current and non-current assets ● current and non-current liabilities ● equity. c) Completion of a statement of financial position.

	d) Analysis of a statement of financial position.
Subject content	What students need to learn
2.4 Bankruptcy	a) Knowledge and understanding of bankruptcy and the division of assets among various creditors.
	b) Calculations, given assets and liabilities of a bankrupt business: <ul style="list-style-type: none">• sums owing to secured creditors• sums available to unsecured creditors• dividend available for unsecured creditors• sum payable to an unsecured creditor owed a stated amount• amount owed to an unsecured creditor paid a stated amount• segregation of debts of a creditor with both secured and unsecured debts paid a stated amount.

3. Depreciation of business assets

Subject content	What students need to learn
3.1 Terminology and concept	a) Knowledge and understanding of different concepts in depreciation. Current asset, non-current asset, depreciation, carrying value, working life, depreciation schedule, scrap value, reducing balance depreciation, straight line depreciation.
3.2 Straight line depreciation	a) Knowledge and understanding of straight-line depreciation and how to apply it to a business situation. b) Calculation of: <ul style="list-style-type: none"> ● total depreciation over a period of years using straight line depreciation ● annual depreciation ● carrying value of a non-current asset after deduction of depreciation ● comparison of these figures with another straight-line depreciation scenario.
3.3 Reducing balance depreciation	a) Knowledge and understanding of reducing balance depreciation and how to apply it to a business situation. b) Calculation of: <ul style="list-style-type: none"> ● total depreciation over a period of years using reducing balance depreciation ● amount of annual depreciation in any single year ● rate of annual depreciation ● carrying value of a non-current asset after deduction of depreciation ● comparison of these figures with another reducing balance depreciation scenario.

Subject content	What students need to learn
3.4 Presentation of findings	a) Presentation of calculations through: <ul style="list-style-type: none">• preparation of a depreciation schedule for either method of depreciation, showing annual and accumulated depreciation over the lifetime of the non-current asset, and the carrying value at the end of each year• drawing a graph of carrying value against time for one or more depreciation calculations.
3.5 Comparison	a) Knowledge and understanding of how to compare depreciation methods. b) Comparison and explanation of: <ul style="list-style-type: none">• most appropriate method for depreciation• comparative values at points in time.

4. Investment appraisal and optimisation

Subject content	What students need to learn
4.1 Terminology and concept	a) Knowledge and understanding of different terminology and concepts in investment appraisal. Net Present Value (NPV), Internal Rate of Return (IRR), Average Rate of Return (ARR), depreciation, discount factor, payback, payback period, cash flow.
	b) Knowledge and understanding of different terminology and concepts in logistics and inventory management. Logistics, scheduling, demand, stock, buffer stock, profit maximisation, sales maximisation, credit taken, credit granted, insurance.
4.2 Payback	a) Knowledge and understanding of payback periods, and calculation of a payback period given suitable information.
	b) Appraisal of an investment project on the basis of the period required to pay back the initial sum invested.
4.3 Net Present Value (NPV)	a) Knowledge and understanding of NPV, given suitable information.
	b) Calculation of: <ul style="list-style-type: none"> ● NPV given outflows and inflows for a project and a set discount factor ● discount factor given information about the estimated time value of money.
4.4 Internal Rate of Return (IRR)	a) Knowledge and understanding of IRR, given suitable information.

	<p>b) Calculation of:</p> <ul style="list-style-type: none"> • IRR of an investment project, given information about net present values at different discount factors • NPV at a particular discount factor, given information about NPV at a different factor and given the IRR.
Subject content	What students need to learn
4.5 Annual Rate of Return (ARR)	<p>a) Knowledge and understanding of ARR, given suitable information.</p> <p>b) Calculation of:</p> <ul style="list-style-type: none"> • assessment of charges over the lifetime of a project • total return of a project over its lifetime • Average Rate of Return.
4.6 Optimisation	<p>a) Knowledge and understanding of the principles of ordering, scheduling and resource allocation to maximise output, profit, or sales.</p> <p>b) Calculations relating to:</p> <ul style="list-style-type: none"> • matching of tasks to be performed to different staff members, and the way in which these can be allocated to maximise output, including finding complete matchings and including use of bipartite graphs • linear programming by deriving equations or inequalities from given data concerning two variables and using an objective function to find a feasible or optimal solution • graphical solution of two variable problems using ruler and vertex methods, to find maximum profit, maximum output, or minimum cost, including consideration of integer value solutions • modelling of a project to find the most advantageous schedule, using a Gantt chart, limited to four elements to be sequenced.
4.7 Inventory	<p>a) Knowledge and understanding of different methods of managing inventory, and the ordering costs involved.</p>

	<p>b) Calculations relating to:</p> <ul style="list-style-type: none"> • Economic Order Quantity (EOQ) • ordering cost • holding cost • total cost • changes to include given buffer stock or supplier discount.
Subject content	What students need to learn
4.8 Presentation of findings	<p>a) Knowledge and understanding of the ways in which findings can be presented.</p> <p>b) Presentation of calculations through:</p> <ul style="list-style-type: none"> • preparation of a Net Present Value table, showing annual cash inflow and/or outflow over the lifetime of the proposed investment, discount factors, and the carrying value at the end of each year • drawing a graph of Internal Rate of Return against net present value, or of cash inflow against Net Present Value or Internal Rate of Return, in which all relationships will be assumed to be linear • other graphs involving inventory, credit taken or given • preparation of bipartite graphs to efficiently allocate resources, such as staff members • preparation of Gantt charts with up to four elements, showing the dependency of one element upon another.
4.9 Comparison	<p>a) Understanding of how to compare investment projects and appraisals, find the optimum for a linear programming problem, or assess use of an Economic Order Quantity.</p>

b) Interpretation of:

- calculations carried out on a specific project, making judgements as to whether to proceed with that project
- calculations to compare alternative projects, making judgements as to which, if either, should be proceeded
- linear programming graphs to find optimum values in terms of cost, profit, or output
- the costs involved in using or not using an Economic Order Quantity.

5. Simple and compound interest

Subject content	What students need to learn
5.1 Terminology and concept	a) Knowledge and understanding of different terminology and concepts in simple and compound interest. Principal, rate of interest, loan, investment, period, withdrawal, repayment.
5.2 Calculating interest	a) Knowledge and understanding of the differences between simple and compound interest and their uses within a business environment.
	b) Knowledge and understanding of how interest impacts loans and investments in terms of adding or removing value over time.
	c) The relationship between amount of interest, amount of principal, rate of interest paid or chargeable and the period of a loan or investment.
	d) Knowledge and understanding of how to rearrange and select the formulae relevant to simple and compound interest.
	e) Calculation of: <ul style="list-style-type: none"> ● amount of interest paid/payable after a single year or number of whole years, or several months or days, or a combination of these that may include a fractional or decimal form ● the rate of interest used in arriving at a given amount of interest ● principal borrowed or invested, given the interest paid/payable over a given time ● the number of years, months, or days for which the principal was invested/borrowed, given the amount and rate of interest paid/payable.

Subject content	What students need to learn
5.3 Currency conversion	a) Calculations will involve: <ul style="list-style-type: none">● converting a value from one currency to a second● taking account of conversion fees● converting a different value from a third currency to facilitate comparison● assessing the difference between conversion at one exchange rate with conversion at a later different exchange rate.
5.4 Comparison	a) Knowledge and understanding of how to compare amounts and rates of interest.
	b) Calculations relating to: <ul style="list-style-type: none">● comparison between amounts of simple and compound interest payable on an investment or loan● comparison of interest where compounding occurs over different periods, such as annual, quarterly, monthly, or daily compounding.

6. Indices and trends

Subject content	What students need to learn
6.1 Terminology and concept	a) Knowledge and understanding of different terminology and concepts in indices and trends. Base year, current year, price index, quantity index, price relative, quantity relative, weighted index.
6.2 Simple indices	a) Knowledge and understanding of the uses of different simple indices.
	b) Calculation of: <ul style="list-style-type: none"> • price index or quantity index value from given data • prices or quantities from given data and knowledge of the relevant index.
	c) Conversion between indices and relatives.
6.3 Composite indices	a) Knowledge and understanding of the uses of different composite indices.
	b) Calculation of: <ul style="list-style-type: none"> • value of a weighted index number from given data • future values of prices, quantities or outputs based on given data and knowledge of the weighted index.
	c) Comparison of individual groups or sets to the weighted index or mean and comparison of grouped information, e.g., men, to more general information, e.g., men and women.
6.4 Change of base year	a) Calculations involving: <ul style="list-style-type: none"> • change of base year for a given index value • creation of a new index following change of base year • creation of a chain base index from a given standard index.

Subject content	What students need to learn
6.5 Trends and graphs	a) Knowledge and understanding of graphs used in business to interpret information. Creation of accurate graphs to display given or calculated information, including accurate axes and labeling.
	b) Calculations relating to: <ul style="list-style-type: none"> ● gradient of a line or curve from its graph or from its equation ● identification of intercepts from a graph or from the equation of a given line ● identification of intersections of lines to solve problems.
6.6 Presentation of findings	a) Knowledge and understanding of the ways in which findings can be presented.
	b) Graphical presentation of data, to include bar charts, histograms, pie charts, scatter graphs, bipartite graphs, Gantt charts, stem, and leaf diagrams.
	c) Presentation of information by: <ul style="list-style-type: none"> ● drawing graphs of lines with linear, quadratic, or exponential form ● drawing and identifying intercepts and intersections.