Unit: Business Maths	**Guided Learning Hours:** 200
Exam Paper No.: 5	**Duration:** 20
Prerequisites: Basic Mathematical knowledge	**Corequisites:** A pass or higher in Certificate in Information Systems or equivalence.

Aim: This unit outlines the application concepts and usage of basic business, consumer and practical maths. The unit begins with simpler maths including decimals, place value, addition, subtraction, multiplication, division, percent and percentages, fractions, decimals, estimation, and rounding. It continues with the different ways people earn money; including income and wages, bank savings and current accounts, investments, and more consumer maths skills. Learners will practice reading and understanding earnings statements, time card sheets, income, insurance, deductions and budgeting. Business Maths build basic math proficiency useful for common business and industry practices. It provides the foundation of arithmetic, mathematics and measurements used in common business and industry practices. The unit presents maths skills and knowledge learners can apply to solve financial problems; skills that play a major role in our lives; car loans, mortgage payments, retirement plans, real estate investment and knowing how to calculate the cost of borrowing or the return on investment are important to us all. The unit provides step-by-step guidance through sample problems and solutions related to banking, credit, basic finance and investment. Learners will also gain an understanding of financial instruments and terminology used in business finance such as compound interest, annuities and promissory notes. The unit serves as a good foundation for further studies in both computing and business fields; notably, Business Maths is crucial to everyday office work and is necessary for business expansion. Mastering business maths can help learner career opportunities and likelihood of job promotion. Though Maths is challenging to most people; it is be applied to everything – be it computing or business environment. Business Maths is used by all commercial enterprises to record and manage business operations. Commercial organisations use mathematics in accounting, inventory management, marketing, sales forecasting, and financial analysis.

Required Materials: Recommended Learning Resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.

Special Requirements: The unit requires learners to practice basic maths fundamentals.

Intended Learning Outcomes:	Assessment Criteria:	
1. Providing a firm foundation in basic principles of mathematics and recapping on whole numbers, fractions and decimals.	1.1	Demonstrate how to read whole numbers
	1.2	Demonstrate how to add whole numbers
	1.3	Demonstrate how to subtract whole numbers
	1.4	Demonstrate how to do whole number division
	1.5	Demonstrate how to identify types of fractions
	1.6	Demonstrate adding and subtracting fractions
	1.7	Demonstrate multiplying and dividing fractions
	1.8	Demonstrate how to read and write decimals
	1.9	Be able to add and subtract decimals
	1.10	Be able to divide decimals by whole numbers
2. Banking terms, the process of solving various forms of equations and percentage problems.	2.1	Describe different bank account types
	2.2	Describe various bank transactions
	2.3	Identify elements of a cheque
	2.4	Explain the different bank charges
	2.5	Demonstrate how to solve equations

			using multiplication, division, addition and subtraction
		2.6	Demonstrate how to solve equations using more than one operation
		2.7	Demonstrate how to write whole numbers, fractions and decimals as a percent
3. The differences between cash discount and trade discount; solving trade and cash discounts, markup/markdown and payroll system.		3.1	Evaluate trade discount and net price
		3.2	Explain discount period and credit periods
		3.3	Calculate cost, markup and selling price
		3.4	Compute percent of markup based on cost
		3.5	Compute gross and net pay
		3.6	Describe employers payroll charges and taxes
		3.7	Describe employees' payroll charges and taxes
4. Banking terminology; differentiating simple and compound interest rates, promissory notes and future/present values.		4.1	Explain interest, simple interest, principal, rate and time key terms
		4.2	Demonstrate how to use the simple interest formula
		4.3	Identify promissory note terms
		4.4	Demonstrate how to compare and contrast simple interest and compound interest
		4.5	Describe annuities and sinking funds
5. Financial credit analysis techniques and analysing the effect of credit on consumers.		5.1	Describe various credit terms
		5.2	Outline and estimate annual percentage rate (APR)
		5.3	Describe mortgage payments
		5.4	Calculate monthly mortgage payments and total interest on a mortgage
		5.5	Describe different types of mortgages available
6. Financial statements, depreciation and inventory; the different business taxes, insurances and share trading.		6.1	Describe balance sheet terms
		6.2	Demonstrate how to prepare a balance sheet
		6.3	Explain the purpose of income statement
		6.4	Demonstrate how to prepare an income statement (profit and loss account)
		6.5	Demonstrate how to analyse and interpret financial reports
		6.6	Describe depreciation
		6.7	Analyse different depreciating methods
		6.8	Explain inventory key terms
		6.9	Describe different methods of finding closing stock value
		6.10	Demonstrate how to calculate different business taxes, sales/value added taxes, duty, PAYE, government levies etc
		6.11	Describe the importance of insurance cover
		6.12	Analyse different types of insurance policies
		6.13	Describe the stock exchange

	6.14 Demonstrate how to explain stock listings
	6.15 Describe shares, bonds and mutual funds
7. Statistical probabilities used in business and describing the importance of business statistics.	7.1 Describe key statistical terms
	7.2 Describe measures of central tendency, mean, median and mode
	7.3 Analyse how statistics plays a big role in society and business
	7.4 Describe bar, line and pie chart graphs
	7.5 Demonstrate how to draw and interpret graphs

Methods of Evaluation: A 2-hour written examination paper with Section A and Section B. Section A has 40 multiple choice questions. Section B has three essay questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework in Business Maths with a weighting of 100%.

Recommended Learning Resources: Business Maths

Text Books	• Practical Business Math Procedures by Jeffrey Slater ISBN-10: 0073377538 • Basic Business Mathematics by Eugene Don and Joel Lerner ISBN-10: 0071611584 • Practical Business Math: An Applications Approach by Michael D. Tuttle ISBN-10: 0130256676
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	None