CONTENT DISTRIBUTION

SUBJECT: SUBSIDIARY MATHEMATICS

COMBINATIONS: LFK, HLP&HGL

Class: S5

Number of period per week: 3 periods

Term 1 (36 periods)

UNIT 1: INTRODUCTION TO LOGIC (36 periods)				
Key unit Competence: Use mathematical logic as a tool of reasoning and decision making in daily life				
Week	Contents	Number		
		of		
		Periods		
1	Introduction activity	1		
	Simple statement	2		
2	Compound statements	2		
	Truth values and Truth tables	1		
3	The negation "Not"	1		
	The conjunction "and"	2		
4	The disjunction "or "	1		
	Concept of conditional statement "if ,, then"	2		
5	Converse and contrapositive	2		
	Inverse of a conditional	1		
6 -7	The bi-conditional statement "if and only if"	2		
	Tautology	2		
	Contradiction	2		
8-9	Quantifiers: Universal quantifier "for all"	2		
	Existence quantifier "there exists"	2		
	Negation of quantifiers	2		
10-11	Hypothetical syllogism	2		
	Affirming the antecedent	2		
	Denying the consequent	2		
12	Revision for this unit 1	2		
	End unit assessment	1		
13	EXAM			

Term 2 (36 periods)

UNIT 2	UNIT 2: POINT, LINES IN 2D AND GEOMETRIC SHAPES (24 periods)				
Week	Lesson titles	Number of			
		Periods			
1	Introductory activity	1			
	Cartesian coordinate of a point in 2D.	2			
2	Distance between two points in 2D	1			
	Mid-point of a line segment	1			
	Distance between two points in 2D	1			
3	Vector in 2D	1			
	Dot product of vectors in 2D	1			
	Properties of dot product in 2D	1			
4	Vector equation of a straight line	1			
	Parametric equation of a straight line	1			
	Cartesian equation of a straight line	1			
5	Position of a point to the line	1			
	Position of two lines	1			
	Condition of parallelism	1			
6	Angles between two lines	1			
	Condition of perpendicularity	1			
	Identification of Geometric shapes in 2D	1			
7	Perimeter and area of geometric shapes in 2D: Square, Triangle, Rectangle,	1			
	Perimeter and area of geometric shapes in 2D: Parallelogram, Pentagon and Hexagon	2			
8	Revision of this unit 2	2			
	End unit Assessment	1			
UNIT 3: GRAPHS AND FUNCTIONS (12/24 periods)					
Key Unit competence : Apply graphical representation of functions in solving economics and					
Wealt		Number of			
WEEK		Nulliber of Parioda			
0	Introductory activity	1			
9	Concredition on numerical functions	1			
10	Generalities on numerical functions	<u>∠</u>			
10	Constant function and identity functions	1			
	Nonomial and polynomial functions	1			
11	Rational and irrational functions	1			
	Domain of definition of polynomial functions	1			
	Domain of definition of rational functions	1			
	Domain of definition of irrational functions	1			
12	Parity of a function (odd or even).	1			
	Addition and subtraction of functions	1			
	Multiplication and division of functions	1			
13	EXAM				

Term 3 (36 periods)

Key Unit competence: Apply graphical representation of functions in solving economics and financial models Number of of Periods Week Lesson titles Number of Periods 1 Composite function 2 Inverse of a function 1 2 Graphical representation and interpretation of guarditic function 2 Price as function of quantity supplied and Consumption as function of income 1 Price as function of quantity demanded and The Cost Function 1 The Revenue Function and The Profit Function 1 The Marginal Cost, Marginal Revenue, and Marginal Profit 1 End unit assessment 1 UNIT 4: SEQUENCES (24 periods) Key unit Competence: Use arithmetic, geometric and harmonic sequences and their convergence to understand and solve problems arising in various contexts. Number of Periods Veek Lesson titles 2 Introductory activity 1 1 Definition of sequences 2 2 rith term of an arithmetic sequence 2 2 Arithmetic mean 2 2 Intorductory activity 1 2	UNIT 3: GRAPHS AND FUNCTIONS (12/2		4 periods)		
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