CONTENT DISTRIBUTION

SUBJECT: SUBSIDIARY MATHEMATICS   **COMBINATION: LFK, HLP &HGL**

Class: S6   **Number of periods per week:** 3 periods

Term 1   (36 periods)

UNIT 1: BI-VARIATE STATISTICS (36 periods)		
Key unit Competence: Extend understanding, analysis and interpretation of bivariate data to correlation coefficients and regression lines		
Week	**Contents**	**Number of Periods**
1	Introductory activity	1
	Concept of bivariate	2
2-3	Scatter diagram plotting	2
	Concept of Correlation and examples	2
	Types of correlation	2
4	Description of Covariance	1
	Determination of covariance for bivariate statistics data	2
5-6	Review on determination of standard deviation	2
	Concept and properties of coefficient of correlation	2
	Problems involving coefficient of correlation	2
7-8	Method of ranking	2
	Concept and properties of Spearman's rank correlation	2
	Problems involving coefficient of rank correlation	2
9	Review on equation of a line defined by a point and a gradient	1
	Concept of regression line	2
10	Regression line of y on x and prediction	2
	Regression line of x on y and prediction	1
11	Problems involving regression line and prediction in various areas	2
	Problems involving Data analysis and interpretation in various areas	1
12	Revision of unit	2
	End unit assessment	1
13	**EXAM**	

Term 2   (36 periods)

Week	Lesson titles	Number of Periods
UNIT 2: COUNTING TECHNIQUES		**(36/48 periods)**
Key unit Competence: Apply counting techniques to determine the number of possible outcomes from the given events.		
1	Introductory activity	1
	Use of **Venn diagram** as counting techniques and related properties	2
2	Concept of **tree diagrams.**	1
	Determination of number of outcomes using **tree diagrams**	2
3	Concept of **contingency table** and properties	1
	Determination of number of outcomes using **contingency table**	2
4	Description of **Product principle**	1
	Determination of number of outcomes using Product principle	2
5	Concept of Mutually exclusive events and examples	1
	Concept of **Sum principle** as counting technique and related problems	2
6	Problems involving Sum and Product principles	2
	Formative assessment on counting assessment involving Sum and Product principles	1
7	Permutations of n unlike objects on a row and notation	2
	Problems involving Permutations of n unlike objects on a row	1
8	Permutations of indistinguishable objects	2
	Problems involving Permutations of indistinguishable objects	1
9	Circular permutations of n unlike objects	2
	Circular permutations of n indistinguishable objects	1
10-11	Permutations of r objects selected from n unlike objects	2
	Properties and calculation of selections permutation	2
	Problems involving Permutations of a selection of r unlike objects and mutually exclusive events	2
12	Permutations of r objects selected from mixture of n alike and unlike objects	2
	Formative assessment on previous lessons of Unit 2	1
13	**EXAM**	

Term 3   (36 periods)

UNIT 2: COUNTING TECHNIQUES		(12/48 periods)
Key unit Competence: Apply counting techniques to determine the number of possible outcomes from the given events.		
Week	**Lesson titles**	**Number of Periods**
1	Review on permutation of a selection	1
	Concept of combinations and examples	2
2	Properties of combination	1
	Problems involving selection from unlike objects and mutually exclusive events	2
3	Combinations/selections taken from mixture of alike and unlike objects	2
	Applications of counting techniques	1
4	Revision of unit 2	2
	End unit assessment	1

UNIT 3: ELEMENTARY PROBABILITY (24 Periods)		
Key Unit Competence: Use counting techniques and concepts of probability to determine the probability of possible outcomes of events occurring under equally likely assumptions.		
Week	**Lesson titles**	**Number of Periods**
5	Introductory activity	1
	Concept of probability (the probability, experiment, sample space and event) and examples	2
6	Probability of an event	1
	Basic probability rules	2
7	Probability of mutually exclusive (incompatible)	1
	Probability **of inclusive events and additive rule**	2
8	Concept of independent events and examples	1
	Probability of independent events	2
9	Multiplication rule	1
	Multiplication rule using tree diagram	2
10	Concept of dependent events and examples	1
	Probability of dependent events (Conditional probabilities)	2
11	Probabilities involving arrangements and combinations	2
	Examples of real life tasks and determination of related probability	1
12	Revision of unit 3	2
	End unit assessment	1
13	**EXAM**	