

**SRI LANKAN SCHOOL - MUSCAT -SCHEME OF WORK - ACADEMIC YEAR 2016/2017**

**CLASS : Yr. 12 MATHS**

**SUBJECT: Double Maths(F/M)**

**TEACHER : Mr Kingsley Appuhamy**

Month	Periods	Unit No.	TOPIC / DETAILS	Chapter	ILO	Remarks
<b>Sept</b>			<b>Module C12</b>			
<b>Week 1</b>	8	C11.1-1.8	Algebra and functions,indices,Factorisation,Surds,Rationalisation.Sketchin	Ch1	<b>Promote</b>	
		2.1-2.6	Graphs of quadratic functions,completeing square method.		<b>Skills In</b>	
		3.1-3.4	Simultaneous Equations and Inequalities	Ch3	<b>Algebra</b>	
		3.5	Solving Quadratic Inequalities Equations	<b>Ch 1-3-C1 Assessment</b>		
<b>Week 2</b>	20	4.1-4.5	Sketching Curves,Cubic and Reciprocal Functions	Ch4		
		4.7	Effects of transformations $F(x+a)$ , $F(x-a)$ and $F(x)+a$	Ch4		
		5.1-5.4	Coordinate Geometry,Equations of straight lines,gradients,Intersection of lines,	Ch5		
		5.4	Parallel Lines and Perpendicular Lines			
		6.1-6.3	Sequences and series AP and GP Sum of the series upto nth term	<b>Ch4-6 -C1 Assessment</b>		
		6.3-6.7	Differentiation :Derivative of $f(x)$ , gradien ,Equations of tangents and normals	Ch7		
<b>Week 3</b>			Eid Hoiliday	Ch8		
Week 4		7.3-7.8	Finding equations of tangents and Normals			
		81-8.5	Intergration as a reverse differentiation related ,Problems			
		<b>C2 1.1-1.2</b>	Algebra and functions ,Factor Theorem,Remainder Theorem	<b>Ch7-8- C1 Assessment</b>		
		1.3-1.4	Factorising Polynomials using Factor Thereom	ch1		
		2.1-2.3	Sine rule and Cosine Rule	ch2		
<b>Oct</b>			<b>Module C12</b>			
<b>Week 1</b>	10	2.4-2.7	Sine rule and Cosine Rule	<b>Monthly Test</b>		
		3.1-3.4	The exponential and log functions,Grapha of exponential functions	Ch3	<b>Skills</b>	
<b>Week 2</b>	10	3.5	Changing the Base of Logarithm		<b>in</b>	
	10	3.6	Solving Equations using logarithm		<b>Calculus</b>	
<b>Week 3</b>	10	4.1-4.3	Corrdinate Geometry in X-Y Plane	Ch4		
	10	5.1-5.4	Binomial Expansion	<b>Ch2-5 -C2 Assessment</b>		
<b>Week 4</b>	20	6.1-6.4	Radian Measure,Areas of Sectors,and segments	Ch6		
		7.1-7.5	Geometric Sequences	Ch7		
<b>Nov</b>			<b>Module C12</b>			
<b>Week 1</b>	16	9.1-9.3	Differentiation	Ch9	<b>Promote</b>	
	10		differentiation ,Maximum and Minimum and Points of reflexion		<b>Skills in</b>	
<b>Week 2</b>	20	10.1-10.4	Trigonometric Identities and Simple Equations	Ch10	<b>Differention</b>	

	10		Solving Simple trigonometric equations, and quadratic trigonometric equations			
<b>Week 3</b>	10	11.1-11.5	Intergration as a reverse differentiation related ,Problems	Ch11	<b>Intergration</b>	
	10		Area Under Curves ,Trapezium Rule			
<b>Week 4</b>	10	C31.1-1.4	Algebra and Functions	Ch1		
	10	2.1-2.5	Mapping ,composite Functions	Ch2		
<b>Dec</b>			<b>Module C34</b>			
<b>Week1</b>	10	3.1-3.3	<b>Exponential and Log Functions</b>	Ch3	<b>To Calculate</b>	
		4.1-4.5	<b>Numerical Methods</b>	Ch4	<b>approximate</b>	
Week 2	10	5.1-5.5	<b>Transforming Graphs and Functions + Revision</b>	Ch5	<b>roots</b>	
<b>Week 3</b>			<b>First Term Test</b>			
<b>Week 4</b>			<b>Winter Holidays 22 nd to 7<sup>th</sup> of January</b>			
<b>Jan</b>			<b>ModuleC34</b>			
<b>Week 2</b>	20	<b>C3-7.1-7.5</b>	Further Trigonometric Identities and their applications,Factor formulae	Ch7	<b>Promote</b>	
		<b>8.1-5</b>	Differntiation Using Chain Rule,Product Rule,Quotient Rule	Ch8	<b>Skills</b>	
			Differentiating exponential Functions		<b>in</b>	
		<b>8.5-8.9</b>	Differntiation of logarithmic functions		<b>Calculus</b>	
			Differentiation of Sinx,Cos x and tan x and Further trgonometrical function			
	8	C4-1.1-2.4	Partial Fractions ,Coordinate Geometry,and Parametric equations	Ch1,2		
<b>Week 3</b>	10	3.1-3.3	Binomial expansion for positive and negative Rational Index	<b>Ch3</b>		
	10	4.1-4.3	Differentiating functions given by parametrically ,Implicit Functions	<b>Ch4</b>		
<b>Week 4</b>	10	4.4	Rate of changes and Simple differential Equations		<b>Knowledge</b>	
	10	5.1-5.7	Vectors in 2D and 3D,Scalar Product of vectors Angle between lines,Intersection of two lines	<b>Ch5</b>	<b>of Vectors</b>	
<b>Week 5</b>	10	5.8-5.9	Intergration using Identities,By Parts,Find Areas and Volumes	Ch6		
	10	M1				
<b>Feb</b>			<b>Module C34,M1,S1</b>			
<b>Week 1</b>	10	1.1-	Mathematical Models in mechanics	Ch1	<b>Promote</b>	
	10	2.1-	Vectors in Mechanics	Ch2	<b>SKILLS</b>	
<b>Week 2</b>	10	3.1-	Kinematics of a Particle	Ch3	<b>in</b>	
	10	4.1-	Dynamics of a Particle moving in a Straight line	Ch4	<b>Dynamics</b>	
<b>Week 3</b>	10	5.1-6.4	Statics of a particle and moments	Ch5,6	<b>Statics</b>	
	10	1.1	<b>Mathematical models in probability and statistics</b>			
<b>Week 4</b>	10	2.1-	Roots of Quadratic equations	Ch2	<b>Further</b>	
	10	3.1-	Numerical Solutions of equations	Ch3	<b>Maths</b>	
<b>March</b>			<b>Module S1</b>			
<b>Week 1</b>	10	5.1-	Representation of Data	Ch4		
	10	6.1-	Correlation			

			and regression			
<b>Week 2</b>	20		Discrete random variables and normal distribution			
<b>Week 3</b>						
<b>Week 4</b>			Second Term Test			
<b>April</b>						
<b>Week 1</b>			Paper Correction and PTI			
<b>Week 2</b>			April Vacation			
<b>Week 3</b>			Seminars			
<b>Week 4</b>			Edexcel Examination			

	10		Revision -C12			
<b>Week 3</b>			Mock Examination			
			Mock Examination			
<b>Week 4</b>			Mock Examination			
			Mock Examination			
<b>April</b>			<b>AS AND a2 Examinations</b>			
<b>Week 1</b>			<b>5 April</b> Paper correction and Paper discussion			
			<b>6th April - PTI</b>			
<b>Week 2</b>			<b>10 th -16 April</b> School Vaccation			
<b>Week 3</b>			<b>17 April</b> School Reopens			
			Post examination work			
<b>Week 4</b>			Post examination work			
<b>May</b>			<b>AS AND a2 Examinations</b>			
<b>Week 1</b>						
			Edexcel Examinations starts			
<b>Week 2</b>	20		Post Examination work			
<b>Week 3</b>	20		Post Examination work			
<b>Week 4</b>	20		Post Examination work			
<b>June</b>						
<b>Week 1</b>	20		Post Examination work			
<b>Week 2</b>	20		Post Examination work			
<b>Week 3</b>	20		Post Examination work			
<b>Week 4</b>	20		Post Examination work			
<b>July</b>						
<b>Week 1</b>			Summer Vacation			
			Summer Vacation			