## SING YIN SECONDARY SCHOOL Syllabus for F.6 Mathematics (2016-2017) Extended Part – Module 2

Textbook: New Progress in Senior Mathematics – Module 2 Book 1 & Book 2 W. M. Chu & H. M. Chan HK Educational Publishing Co.

Students are expected to develop the following attitudes:

- to love logical thinking
- to accept careful work as important
- to accept challenging work.

11	Matrices and Determinants	16	<ul> <li>To understand the concepts, operations and properties of matrices.</li> <li>To recognise the concepts and properties of determinants of order 2 and order 3.</li> <li>Understand the concepts and properties of inverse matrices of order 2 and order 3.</li> </ul>
12	System of Linear Equations	8	<ul> <li>To solve the systems of linear equations of order 2 and order 3 by Cramer's rule, inverse matrices and Gaussian elimination.</li> </ul>
13	Vectors in Two- dimensional Space	14	<ul> <li>To understand the concepts of vectors and scalars.</li> <li>To understand the operations and properties of vectors.</li> <li>To understand the representation of vector in the rectangular coordinate system.</li> <li>To understand the definition and properties of the scalar product of vectors.</li> <li>To understand the applications of vectors.</li> </ul>
14	Vectors in Three- dimensional Space	11	<ul> <li>To understand the operations and properties of vectors in R³.</li> <li>To understand the definition and properties of the vector products in R³.</li> <li>To understand the definition and properties of scalar triple product in R³.</li> <li>To understand the applications of vectors.</li> </ul>
Revision			<ul> <li>Sing Yin Past Papers</li> <li>HKCEE Past Papers</li> <li>HKALE Past Papers</li> <li>HKDSE Past Papers</li> </ul>

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Signature of Teacher In Charge :
Checked by: