

**Tak Sun Secondary School**  
**Term 1 Test Syllabuses 2011/12**  
**Form 7**

Subject	Syllabus	Remarks
Applied Mathematics	<p><b>Paper II</b></p> <ul style="list-style-type: none"> <li>● Differential Equations (Notes B1 to B2)</li> <li>● Numerical Methods (Notes C1 to C3)</li> <li>● Probability and Statistics (Notes D1 to D2)</li> </ul>	
Biology	Books 1 - 3	
Chemistry	Topics 5 – 9 Topics 11 – 12	
Chinese Language and Culture	卷一 實用文：評論、報告、專題介紹、新聞稿、 建議書、演講辭、書信、公函 卷二文化問題：六篇指定文化專題篇章、 非課程指定的文化專題	
Computer Applications	Networking and SOHO Network Database	
Economics	Textbook A-Level Microeconomics Chapter 1 - 20 Textbook A-Level Macroeconomics Chapter 1 - 13	Students should bring a calculator for the exam.
Geography	<p><b>Section B. Agricultural landscape</b></p> <ol style="list-style-type: none"> <li>1. Farming as an ecological system and economic system</li> <li>2. spatial patterns in agricultures landscapes: land-rent and distance-decay concepts, concepts of agricultural location (Von-Thunen, Sinclair)</li> <li>3. impact of urbanization and industrialization on farming</li> <li>4. Farming hazards (Floods, droughts): Nature, magnitudes and frequency, effects and solutions</li> </ol> <p><b>Section C Urban and industrial landscape</b></p> <ol style="list-style-type: none"> <li>1. Location, Spacing , size and functions of urban settlements</li> <li>2. Spatial patterns in urban landscapes               <ol style="list-style-type: none"> <li>(a) land rent and distance decay concepts, concepts of urban structure (Burgess, Hoyt, Harris and Ullman)</li> <li>(b) urban population densities</li> </ol> </li> <li>3. Concepts of manufacturing location (Weber) role of raw materials , energy labour transport market, technology, behavioural and institutional factors; agglomeration and decentralization</li> <li>4. Urban problems: Housing and transport problems</li> </ol>	
Mathematics and Statistics	Chapter 10 & 11 Basic Statistical Measures & Frequency Distributions Chapter 12 & 13 Probability and Probability of Compound Events	

	<p>Chapter 14 and 15 Discrete Probability Distribution and Special Discrete Distributions</p> <p>Chapter 16 The Normal Distribution and Its Applications</p> <p>Chapter 18 Comparison of Empirical Frequency Distributions with Fitted Distributions</p>	
Physics	<p>Wave</p> <p>Mechanics</p> <p>Electricity and Magnetism</p>	
Principles of Accounts	<ul style="list-style-type: none"> <li>✓ Accounting equation, accounting cycle and year end adjustment</li> <li>✓ Depreciation and capital expenditure</li> <li>✓ Bank Reconciliation statement</li> <li>✓ Errors and suspense</li> <li>✓ Control Accounts</li> <li>✓ Incomplete records</li> <li>✓ Income and expenditure accounts</li> <li>✓ Partnership</li> <li>✓ Limited Company</li> <li>✓ Conversion</li> <li>✓ Cash Flow statement</li> <li>✓ Ratio</li> <li>✓ Consolidation</li> <li>✓ Lease</li> <li>✓ Valuation of assets</li> <li>✓ Income determination</li> <li>✓ Published Accounts</li> <li>✓ Costing principles and job costing</li> <li>✓ Process costing</li> <li>✓ ABC costing</li> <li>✓ Absorption Vs. Marginal costing</li> <li>✓ CVP analysis</li> <li>✓ Other short run decision making</li> </ul>	Students should bring a calculator for the exam.
Pure Mathematics	<p><b>Paper I</b></p> <p>Topic 1: Mathematical induction</p> <p>Topic 2: Inequalities</p> <p>Topic 3: The binomial theorem for positive integral indices</p> <p>Topic 4: Complex numbers, De Moivre's theorem for rational indices</p> <p>Topic 5: Polynomials with real coefficients in one variable, Rational functions, Polynomial equations with real coefficients in one variable</p> <p>Topic 6: Matrices, Square matrices of order 2 and 3, Applications to 2-dimensional geometry</p> <p>Topic 7: System of linear equations in 2 or 3 unknowns</p> <p>Topic 8: Conic sections in rectangular coordinates, Plane</p>	

	<p>curves in rectangular coordinates</p> <p>Topic 9: Functions and their graphs, Elementary functions</p> <p>Topic 10: Intuitive concepts of limit, and based on that continuity and differentiability</p> <p>Topic 11: Differentiation, Applications of differentiation</p> <p>Topic 12: Integration, Methods of integration, Applications of integration</p>	
Use of English	<p>Complete Exam Practice for AS Use of English, Longman 2006</p> <p>UE Exam Past Papers</p> <p>Notes for Use of English</p> <p>English articles for students to read</p> <p>SCMP subscription</p>	