FOREWORD

This syllabus has been prepared by the Mathematics Subject Committee (Secondary) of the Curriculum Development Committee, Hong Kong. It is an amalgamation of, and replaces, the two mathematics syllabuses A and B issued to schools in 1982. Contents of the present syllabus are largely based on the previous two syllabuses and therefore it is not an entirely new syllabus. Adjustments are made during the process of amalgamation in order to maintain the integrity and consistency of the contents.

The syllabus presented here serves as a teaching guide which will lead to the Hong Kong Certificate of Education mathematics examination syllabus for 1988 and onwards issued by the Hong Kong Examinations Authority. It does not pretend to provide a great new insight into what mathematics teachers should be trying to achieve. Rather it seeks to provide an indication on how and to what depth a certain topic should be treated through its suggested notes on teaching and time ratio. Its overall objectives are:

1. to continue the development of numeracy begun in the primary school-this includes much of the number work, and ability to cope with approximations, percentages, rates and ratios, and simple mensuration;

2. to prepare students to understand everyday applications outside the classroom
   — for example by teaching the fundamentals of statistics and probability;

3. to provide a basis for further work in Science and Mathematics
   — by teaching the use of mathematical symbolism and facility with its manipulation,
   — by developing an ability to use the basic logical patterns and conventions of reasoning,
   — by introducing necessary tools (such as the trigonometric ratios);

4. to introduce a general sense of the pattern and power of mathematics both as a tool and as a part of our cultural heritage.

In the *fourth and fifth forms,* the objectives include

5. to give more emphasis to the nature and application of mathematics;

6. to complete the foundations required by those wishing to study sixth form mathematics (no sixth form mathematics should be taught in the fourth or fifth forms however).

These objectives reflect an emphasis which treats mathematics more as a tool than a way of thought.

The calculator is now a fact of life in the classroom. It is desirable that the proper use of the calculator should be taught, especially in topics which' involve lengthy and complex calculations.

Recreational mathematics helps to promote students' interest towards mathematics. This topic could be introduced to students either as part of the lessons or through activities organized by the school mathematics clubs.

The syllabus contains very few items which are entirely new to pre-sixth form mathematics, but teachers are asked to think afresh about their approach to them. In this respect, teachers may refer to the notes on teaching.