Computer Studies Support Booklets

These five booklets cover the CIE computer studies syllabus theory (0420/1, 7010/1). They should be used in conjunction with the appropriate syllabus topic.

Each booklet also contains exam-type questions. The questions could be used either for revision or in timed tests to give students experience at answering questions under examination conditions.

Whilst there are several examples on each topic, it is not envisaged that students would use these booklets as their sole source of information. These booklets don't replace good teaching and should be used as an additional resource together with text books and web-based knowledge systems.

Since computer studies, by its very nature, is a rapidly changing subject these booklets will be reviewed on a regular basis to ensure they contain the latest technological advances. Teachers of the subject are encouraged to keep abreast of the latest developments in computing and apply their new knowledge in the teaching of this subject. Students should find computer studies both exciting and stimulating and it is hoped that these booklets will help students in their thirst for knowledge and encourage further learning.

Booklet 1

This covers the following topics found in section 1 of the computer studies syllabus:

Item	*Topic*
1	Computer aided design
2	Virtual reality systems
3	Monitoring and control
4	Embedded web technology
5	Robotics
6	Global positioning satellite (GPS) systems
7	Expert systems
8	The internet
9	Simulations
10	Training and entertainment systems
11	Computer based training
12	Communications (including video conferencing)
13	Intranets
14	Further applications
15	Problems based on section 1 topics

Booklet 2

This covers the following topics found in section 2 of the computer studies syllabus:

Item	*Topic*
1	Feasibility study
2	Analysis
3	Design
4	Implementation
5	System maintenance and evaluation
6	Project tools
7	Systems flowcharts
8	Problems based on section 2 topics

Booklet 3

This covers the following topics found in section 3 of the computer studies syllabus:

Item	*Topic*
1	Common flowchart symbols
2	Writing flowcharts to solve problems
3	Dry running of flowcharts
4	Problems based on flowcharting
5	Pseudocode
6	Writing algorithms using pseudocode
7	Problems based on pseudocode
8	Introduction to logic
9	Description of common logic gates
10	Combinations of logic gates
11	Problems based on logic

Booklet 4

This covers the following topics found in section 4 of the computer studies syllabus:

Item	*Topic*
1	Automatic data capture
2	Validation techniques
3	Check digits
4	Verification techniques
5	Files
6	Binary data
7	Word processors
8	Desk top publishing (DTP)
9	Spreadsheets
10	Databases (DBMS)
11	Authoring software
12	“Off the shelf”/bespoke software
13	Macros
14	Problems based on section 4 topics

Booklet 5

This covers the following topics found in section 5 of the computer studies syllabus:

Item	*Topic*
1	Hardware
2	Computer memories
3	External storage systems
4	Credit cards and smart cards
5	Sensors
6	Operating systems
7	Batch processing
8	Real time systems
9	Network topology
10	Multimedia applications
11	Problems based on section 5 topics