

# 2007 / 2008 only

## A Level ICT

### AS Level

#### **MODULE 1: Information: Nature Role and Context**

Knowledge, information and data; Value and importance of information; Control of Information; Capabilities and limitations of information technology; The social impact of information technology; Role of communication systems; Information and the professional; Information systems: malpractice & crime; The legal framework; Software and data misuse; Data Protection legislation; Health and Safety

#### **MODULE 2: Information: Management and Manipulation**

Data capture; Verification and validation; Organisation of data for effective retrieval; Software; nature, capabilities and limitations; Nature and types of software; Capabilities of software; Upgradability; Reliability; Manipulation and/or processing; Dissemination/distribution; Hardware; nature, capabilities and limitation; Security of data; Backup systems; Network environments; Human/Computer interface

#### **MODULE 3: Coursework: The Use of Generic Application**

Coursework: 40% of the total AS marks 60 marks. A solution to a task allowing candidates to demonstrate advanced knowledge of an applications package. You will be required to undertake a project. For this project the candidate will be expected to tackle a task related problem, which will have a limited scope and will be a self-contained problem. The solution is very likely to be based on the facilities of one piece of generic software, although the candidate is encouraged to use other software tools and objects as appropriate to complete the solution. Microsoft Access will be used

### A Level

#### **MODULE 4 – Information Systems within Organisations**

Management Information Systems; The Information Systems Life Cycle; Implementation of Information Systems and Strategy; Expert Systems; Management of change; Security Policies; Disaster Recovery; Implementation of Legislation; User Support and Training; Project Management; Codes of Practice

#### **MODULE 5 – Information: Policy, Strategy and Systems**

System Security, Backup Policies and Accounting; Software Acquisition, Testing and Evaluation; Human-Computer Interface; Data Modelling; Relational Database Design and Management; Communications and Information Systems; Data Communications and Standards

#### **MODULE 6 – Coursework: Use of Information Systems for Problem Solving**

You are expected to undertake a second project that is similar to Module 3, but with a greater emphasis on:

- the Analysis of an existing Information System that has real end users
- the design of a new system that will meet the specified performance criteria
- the Implementation of the new system
- Testing (strategy, plan and end user)
- User Manual

## **A Level**

Unit 6 Coursework: 20% of the total A Level marks 90 marks.

The project will require candidates to identify and research a realistic problem for a real end-user and develop an information system.

## **AS Level**

Unit 1 – Written Paper: 1½ hours 30% of the total AS marks.

Short answer and structured questions assessing Module 1.

Unit 2 – Written Paper: 1½ hours 30% of the total AS marks.

Short answer and structured questions assessing Module 2.

## **A level**

Unit 4 Written Paper: 2 hours 15% of the total A Level marks.

Short answer, structured questions and an essay assessing Module 4.

Unit 5 Written Paper: 2 hours 15% of the total A Level marks.

Short answer, structured questions and an essay assessing Module 5.

## **Homework**

At this level considerable work outside the classroom is needed to fulfil the requirements of the course, both in terms of written and practical work. It should be made clear at the outset of an examination course that pupils will need to use lunchtimes and after school sessions for group practical work in order to reach the required standard.