## A-LEVEL COMPUTER SCIENCE

Paper 1: Computer Systems

Candidate Name:	
Candidate Number:	
Centre Number:	
Date of Examination:	

Time Allowed: 1 hour 30 minutes
Total Marks: 40 marks

## **INSTRUCTIONS**

- Answer **ALL** questions.
- Write your answers in the spaces provided.
- $\bullet$  Use black ink or ball-point pen.
- Draw all diagrams in pencil.
- Show all your working.

## INFORMATION

- The total number of marks for this paper is 40.
- The marks for each question are shown in brackets.
- ullet You are reminded of the need for clear presentation in your answers.

GRADE BOUNDARIES

	Grade	Raw Mark Boundary
	A*	36-40
)	A	32-35
	В	28-31
	$\mathbf{C}$	24-27

## Section A: Software and Software Development

Question 1 [5 marks]

Explain the difference between system software and application software. Give two specific examples of each.

Question 2 [8 marks]

Describe the stages of the software development life cycle (SDLC). For each stage, explain its purpose and key activities.

Question 3 [7 marks]

Compare and contrast two different types of programming paradigms (e.g., object-oriented and procedural programming). Discuss their strengths and weaknesses.

Question 4 [10 marks]

a) Explain the concept of abstraction in software development.

[4 marks]

b) Describe how abstraction is implemented in a high-level programming language. Provide a specific code example to illustrate your explanation. [6 marks]

Question 5 [10 marks]

Discuss the importance of testing in software development.

- Explain different types of software testing
- Describe the purpose of each testing method
- Provide an example of when each testing method would be most appropriate

END OF QUESTIONS