

OCR GCSE Computer Science (J277)

Paper 1 – Computer Systems

Candidate Number: _____

Total Marks: 80

Question 1 (4 marks)

What is meant by an input device? Give one example.

An input device is something you use to put data into a computer. A keyboard is an input device.

Examiner: 3/4 – Definition and example correct, limited detail.

Question 2 (6 marks)

Explain two differences between RAM and ROM.

RAM is used when the computer is on and ROM is used when it is off. RAM can change but ROM cannot change.

Examiner: 4/6 – Some correct differences, imprecise explanations.

Question 3 (3 marks)

What is a network?

A network is when computers are connected together.

Examiner: 2/3 – Basic definition only.

Question 4 (6 marks)

Describe how data is represented in a computer.

Computers use binary. Binary is made of 1s and 0s. Everything is stored using these numbers.

Examiner: 3/6 – Some understanding of binary, lacks depth.

Question 5 (4 marks)

State one function of an operating system and explain why it is needed.

The operating system lets you use the computer and open programs.

Examiner: 2/4 – Function identified, explanation limited.

Question 6 (8 marks)

Explain how the CPU processes instructions.

The CPU gets instructions and does what the program says. It works very fast.

Examiner: 3/8 – Very limited understanding of fetch-decode-execute.

Question 7 (6 marks)

Describe two uses of secondary storage.

Secondary storage is used to save files and programs. It keeps data for later.

Examiner: 3/6 – Some correct uses, minimal explanation.

Question 8 (8 marks)

Explain what is meant by cyber security and give one threat.

Cyber security is keeping computers safe. A virus is a threat.

Examiner: 4/8 – Basic understanding shown.

Question 9 (6 marks)

Describe how data can be protected.

Data can be protected using passwords and antivirus software.

Examiner: 3/6 – Methods stated, little explanation.

Question 10 (8 marks)

Explain what is meant by an algorithm.

An algorithm is a set of instructions to solve a problem.

Examiner: 4/8 – Correct definition only.

Question 11 (5 marks)

State two programming constructs.

Sequence and repetition.

Examiner: 2/5 – Identification only.

Question 12 (6 marks)

Describe one ethical issue related to computer use.

People can steal information online which is wrong.

Examiner: 3/6 – Basic awareness.

Question 13 (6 marks)

Explain how networks are used in schools.

Networks let students log in and share files.

Examiner: 3/6 – Some correct points.

Question 14 (4 marks)

What is meant by software?

Software is the programs on a computer.

Examiner: 2/4 – Basic definition.

Question 15 (10 marks)

Describe the difference between system software and application software.

System software runs the computer and application software lets you do tasks like writing.

Examiner: 6/10 – Some comparison, limited examples.

Total Mark: 44 / 80

Overall examiner comment: The candidate shows basic understanding of key concepts but explanations are limited and lack technical vocabulary. This performance is consistent with a Grade 3.