

IGCSE Computer Science

Name: _____ Score: _____

1. Which is system software?

- ☐ a word processor
- ☐ a web browser
- ☐ a spreadsheet
- ☐ the operating system

2. A high-level language (like Python):

- ☐ reads like English and runs on different types of computer
- ☐ is written in binary so the CPU can run it directly
- ☐ is the same as machine code with English labels
- ☐ only runs on one type of CPU and nowhere else

3. Which is a role of the operating system?

- ☐ storing data magnetically
- ☐ spraying ink onto paper
- ☐ managing memory and files
- ☐ displaying pixels

4. A compiler:

- ☐ stops at the first error and runs the lines before it
- ☐ translates and runs the program one line at a time
- ☐ translates the whole program at once, then it runs fast without the compiler
- ☐ must be present every time the compiled program runs

5. An interrupt is:

- ☐ a network cable that carries urgent signals
- ☐ a signal telling the processor something needs attention now
- ☐ a type of file that holds error messages
- ☐ a permanent stop of the computer after a fault

6. An interpreter translates the whole program once, so it runs fast without the interpreter; a compiler translates line by line.

- ☐ True ☐ False

7. A hardware interrupt comes from a device (e.g. a printer out of paper), while a software interrupt comes from a program (e.g. dividing by zero) – both make the CPU pause and service the event.

☐ True ☐ False

8. Which is a feature of an IDE?

- ☐ a magnetic hard disk for storing program files
- ☐ a network cable for downloading libraries
- ☐ auto-completion and error diagnostics in a code editor
- ☐ a CPU socket for testing programs on hardware

1. the operating system

The OS (and drivers, utilities) is system software; the others are application software.

2. reads like English and runs on different types of computer

High-level languages are easy to read/write and portable; low-level languages are CPU-specific.

3. managing memory and files

The OS manages files, memory, peripherals, multitasking, interrupts, the UI and security.

4. translates the whole program at once, then it runs fast without the compiler

A compiler translates everything once into a fast stand-alone program; an interpreter goes line by line.

5. a signal telling the processor something needs attention now

An interrupt makes the CPU pause, service the event, then resume – for quick reactions.

6. False

False. They are swapped: a compiler translates the whole program once and the result runs without it, while an interpreter translates and runs line by line, stopping at the first error.

7. True

Interrupts can be hardware, software or user-triggered; in every case the CPU saves state, handles it, then resumes.

8. auto-completion and error diagnostics in a code editor

An IDE bundles an editor, translator, run-time, diagnostics, auto-complete and prettyprinting.