

7 A computer has an operating system.

(a) The operating system provides several functions.

(i) Tick (✓) **one** box to show which of these is **not** a function of the operating system.

A managing files

☐

B providing an interface

☐

C handling interrupts

☐

D loading the bootstrap

☐

[1]

(ii) Identify **one** other function of an operating system.

Describe the purpose of this function.

.....

.....

.....

..... [2]

(b) Give the name of the set of instructions that are provided to the operating system to allow it to run.

..... [1]

1 Different types of software can be run on a computer.

(a) State what is meant by software.

.....

..... [1]

(b) Utility software is one type of software that can be run on a computer.

Tick (✓) **one** box to show which software is an example of utility software.

A spreadsheet

☐

B anti-virus

☐

C web browser

☐

D database

☐

[1]

(c) Identify the type of software that manages inputs and outputs for the computer.

..... [1]

3 A programmer uses assembly language to create a program for a coffee machine.

(a) Describe what is meant by assembly language.

.....

.....

.....

..... [2]

(b) Identify the translator needed for assembly language.

..... [1]

(c) Tick (✓) **one** box to show which statement is an advantage of using assembly language.

A It is close to human language.

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B It is memory efficient.

☐

C It is easy to debug.

☐

D It is machine independent.

☐

[1]

- 7 A computer programmer uses an integrated development environment (IDE) when creating a computer program.

Explain the purpose of the IDE.

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..... [4]

- 6 A computer needs firmware and system software to operate.

(a) State the purpose of firmware.

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..... [1]

(b) Give **one** example of firmware.

..... [1]

(c) Give **two** examples of system software.

1

2 [2]

- 4 Complete the statements about different types of software.

Use the terms from the list.

Some of the terms in the list will **not** be used. You should only use a term once.

application assembly language bootloader central processing unit (CPU)

firmware hardware operating output system user

..... software provides the services that the computer requires; an example is utility software.

..... software is run on the operating system.

The system is run on the firmware, which is run on the [4]

- 7 A programmer uses a low-level language to write a computer program for a vending machine.

(a) Describe what is meant by a low-level language.

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..... [2]

(b) Give **two** reasons why the programmer would choose to write the computer program in a low-level language instead of a high-level language.

1

.....

2

..... [2]