1. (a) Give two reasons why a programmer would choose to write code in a low-level language.

   1 ....

   ....

   ....

   2 ....

   ....

   ....

   (b) High-level languages require either an interpreter or a compiler to translate the program.

   The table below lists a number of statements about language translators.

   Tick(✓)to show which statements refer to interpreters and which refer to compilers.

statements	Interpreter(✓)	Compiler(✓)
Translates the source code into machine code all at once		
Produces an executable file in machine code		
Executes a high-level language program one instruction at a time		
Once translated, the translator does not need to be present for the program to run		
An executable file is produced		

   (2016-oct-12-01)

2. State four functions of an operating system.

   1 ....

   2 ....

   3 ....

   4 ....

   (2016-oct-12-02)

3. Complete the following by writing either compiler, interpreter or assembler in the spaces provided.

   .... – translates source code into object code.

   .... – translates low-level language into machine code.

   .... – stops the execution of a program as soon as it encounters an error.

   (2016-may-12-01)

4. State three features of a typical operating system.

   1 ....

   ....

   2 ....

   ....

3 ....

....[3]

5. The diagram shows five operating system functions and five descriptions. Draw a line between each operating system function and its description.

Function	Description
Interrupt	Many processes appear to run simultaneously
Utility	Data are temporarily held in a buffer waiting for an output device to access it
Memory management	A signal that causes the operating system to take a specified action
Spooling	A program that performs a specific task required for the operation of a computer system
Multitasking	A process of assigning blocks of memory to programs running in a computer

6. Three programmers are working on different projects:

    • Alice is developing a program written in a low-level language

    • Akbar is developing a program written in a high-level language

    • Alex is preparing a program written in a high-level language for sale

    State, with reasons, which type of translator each programmer should use. Each programmer should be using a different type of translator.

    Alice ....

    ....

    ....

    ....

    Akbar ....

    ....

    ....

    ....

    Alex ....

    ....

    ....

    ....[6]

7. Programmers can use a high-level language to write a computer program.

(a) Explain what is meant by the term 'high-level language'.

....

....

....

.... [2]

(b) A program written in a high-level language is translated into machine code. This is so that it can be processed by a computer.

Name one type of translator that can be used.

.... [1]

(c) Describe how your answer to part (b) translates this program.

....

....

....

....

....

....

.... [3]

(2017-May-11-02)