

# INFORMATION TECHNOLOGY

*Time allowed: 1½ hours*

Answer **TWO** questions. Each question answered will be worth 50 marks.

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**1.**

a) Discuss the terms *Internet* and *World Wide Web*, considering how they are different and any links between them. Describe *three* ways in which an organization could use the Internet that do not use the World Wide Web, and *two* ways in which they might make use of the World Wide Web.

[24 marks]

b) What is SFTP? Explain what it is used for, and the similarities and differences between SFTP and email.

[12 marks]

c) Do you think that the Google search engine has a good interface for users? Why/why not? You may want to compare it with other search engines.

[14 marks]

**2**

a) The following types of software packages are commonly used in businesses:

- Databases
- Word processors
- Presentation software

Name *two* programs that perform each of the above tasks.

[12 marks]

b) What is the purpose of a formula in a spreadsheet?

[8 marks]

c) With reference to the formulas below, explain how the cell referencing system in a spreadsheet works. Indicate what the effect of these formulas would be.

i) =K8-K11

ii) =SUM(G6:G11)

[12 marks]

d) What are the advantages and disadvantages of distributing documents as PDF rather than as editable file formats such as DOCX, ODP etc.?

[18 marks]

3)

a) Name at least three different operating systems (and no more than one from any one company). Describe the purpose of an operating system.

[12 marks]

b) A computer fundamentally operates on the binary digits 0 and 1. Therefore, any character has to be encoded as a binary number. In ASCII the letter D has the decimal value 68. Give its value in:

i) Binary

ii) Hexadecimal

[8 marks]

c) Convert the 16-bit binary number 01010100 11010101 to:

i) Hexadecimal

ii) Decimal

You should show your working.

[10 marks]

d) Explain the terms AND, OR, NOT and XOR. Give examples where each might be used.

[8 marks]

e) Create a complete logic table that describes:

A AND (NOT B OR C)

[12 marks]