

FOR OFFICIAL USE

Presenting Centre No.	Subject No.	Level	Paper No.	Group No.	Marker's No.
	0560				

C

perfectpapers

Total Marks	KU	PS
	36	36

[CS(SG)07C]

NATIONAL
QUALIFICATIONS

Time: 1 Hour 15 minutes

COMPUTING STUDIES
STANDARD GRADE
Credit Level

Estimate Examination Paper

Fill in these boxes and read what is printed below.

Full name of school or college

Town

First name and initials

Surname

Date of birth

Day Month Year

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Read each question carefully

Attempt **all** questions.

Write your answers in the space provided on the question paper.

Answer in sentences wherever possible.

Before leaving the examination room you must give this book to the invigilator. If you do not, you may lose all the marks for this paper.

This test paper must be withdrawn from candidates after the examination and any follow-up discussion of marks/grades awarded. This is to ensure the 'sight unseen' status of this paper is maintained for your centre and other schools/colleges during the diet of prelim examinations in 2005/2006. Submission of this test paper for Appeals purposes will assume that these conditions have been applied.

1. The Social & Vocational Skills class aim to sell items in school as part of their “Make an Item” experience. One group are making a selection of jewellery and use a spreadsheet to calculate how much customers spend on their products.

	A	B	C	D	E	F	G
1	Discount	10%					
2							
3	Name	Bracelet	Necklace	Earrings	Total	Discount	Price to pay
4	R Jones	£1.00	£3.00	£1.00	£5.00	£0.00	£5.00
5	F Summer	£0.00	£3.00	£2.00	£5.00	£0.00	£5.00
6	D Anderson	£2.00	£5.00	£3.00	£10.00	£0.00	£10.00
7	L Walker	£1.00	£5.00	£6.00	£12.00	£1.20	£10.80
8							

- (a) Cell E4 contains a formula to calculate how much each customer owes. It has been *replicated* into cells E5, E6 and E7.

- (i) What is meant by the term replicate?

- (ii) Which type of referencing would have been used to replicate this formula?

- (b) If a customer spends over £10.00 then a 10% discount is given. A formula in F4 calculates any discount which is due.

- (i) Using B1, write down the formula which would be in F4.

= _____ (_____ , _____ , _____)

- (ii) Before being replicated B1 needs to be made an absolute reference. Why is this?

KU	PS
1	
0	
	1
	0
	3
	2
	1
	0
	2
	1
	0

1.
cont

(c) The group made use of an *integrated package*.

(i) What is meant by an integrated package?

(ii) **State two** advantages of buying an **i**ntegrated package.

1. _____

2. _____

(d) The group had to make use of *on-line help* and an *on-line tutorial*.

(i) What is meant by on-line help?

(ii) What is meant by an on-line tutorial?

(e) The group thought that the software used was *user-friendly*.
State **two** ways in which the piece of software could be made user friendly.

1. _____

2. _____

KU	PS
1 0	2 1 0
1 0	
1 0	
	2 1 0

2. (a) David and Ian love using *virtual reality* systems. When on holiday in Florida recently they tried out a new skiing simulator.

(i) What is meant by virtual reality?

(ii) State **two** input devices that would be necessary in order to operate this skiing simulation.

1.

2.

(b) The virtual reality system was written using a *high level language*. All high level languages need to be translated into machine code. This can be done by using a *compiler* or an *interpreter*.

(i) State **one** advantage of using a compiler.

(ii) State **one** advantage of using an interpreter.

(c) The virtual reality system uses *real-time processing*. Why is it important that the virtual reality system uses real-time processing?

KU	PS
1 0	2 1 0
1 0	2 1 0
1 0	2 1 0

2.
cont

(d) The processor of a computer system can be split into three main parts - The *control unit*, the *arithmetic and logic unit (ALU)* and the *registers*.

(i) Explain the purpose of a control unit.

(ii) Explain the purpose of the registers.

(e) How does the operating system locate items in main memory?

KU	PS
1 0	
1 0	
	2 1 0

[Turn over

3.
cont

(d) The database has been registered under the Data Protection Act 1998.

(i) Identify the *data users* in this case.

(ii) Identify the *data subjects* in this case.

(iii) State **two** rights that the data subjects have under this legislation.

1. _____

2. _____

(e) Then accounts department of the Health Club produce monthly reports. These reports can use either *static data linkage* or *dynamic data linkage*. Explain the difference between static data linkage and dynamic data linkage.

KU	PS
	1 0
	1 0
2	1 0
4	3 2 1 0

[Turn over

4. **cont** A kiosk in the Tourist Information Centre displays a *multimedia* presentation. Tourists can use this to find details of places of interest in the local area.

(e) What would make this presentation multimedia?

(f) The presentation contains *hyperlinks*.
What is a hyperlink?

(g) Some of the graphics that were used in the presentation were *cropped*.
What is meant by cropping a graphic?

(h) How does the *Copyright Design & Patents Act* affect the people when they are creating their multimedia presentation?

KU	PS
	10
10	
10	
	10

[Turn over

5. Look Ahead is an *expert system* which gives advice on possible careers after education.

(a) State **one** advantage of using an expert system.

(b) Bobby is currently looking for a plumbing job in Dundee. He decides to use the Internet to search for a suitable job.

Write down the information that would need to be entered into the search engine.

(c) (i) Bobby emails a few companies in his search for a job. One of the companies has requested that he sends his C.V. to them as an *attachment*.
What is an attachment?

(ii) The company decides to interview Bobby using video conferencing.
Apart from a computer system and an internet connection what hardware and software would be needed for video conferencing?

Hardware _____

Software _____

(d) The communications software that is on Bobby's computer is *freeware*.
What is freeware?

KU	PS
1 0	
	3 2 1 0
1 0	
	1 0 1 0
1 0	

6. Banks use ATMs which are networked to allow them access to their *multi-user databases*.

(a) Explain the term multi-user database.

(b) An ATM is fitted with a special card that enables it to communicate with the server. What is this card called?

(c) The operating system provides the *Human Computer Interface* used by the ATMs.

State **two** other functions of an operating system.

1.

2.

(d) Banks carry out both *validation* and *verification* by ATMs. Explain the difference between validation and verification.

(e) Data can be accessed in two ways – *directly* or *sequentially*. Which type of access is suitable in this case?

Give a reason for your answer.

KU	PS
2 1 0	
1 0	
2 1 0	
2 1 0	1 0
	1 0

[END OF QUESTION PAPER]