

SHREWSBURY SCHOOL

SIXTH FORM ENTRANCE EXAMINATION 2010

COMPUTING AND ICT

(I hour)

Instructions to candidates:

- Structured short-answer questions answer both questions
- Extended writing section choose 3 questions to answer
- Answer on lined paper

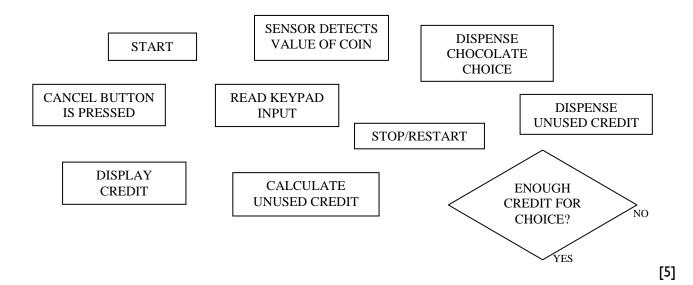
Structured short-answer questions

Attempt both questions.

- I. A garden centre uses an 'Office' package of software that includes a word-processor, spreadsheet, database, desktop publishing and drawing applications.
 - a) Which application would be most suitable to produce a company newsletter? Why? [2]
 - b) Describe 3 key features that you would expect to find in a spreadsheet application. [3]
 - c) Give 2 uses that the company might have for the word-processor. [2]

[3]

- d) Give 3 examples of the kind of data would you expect the garden centre to store on its database.
- 2. A chocolate vending machine allows users to input coins, make their selection using a keypad, collect their chocolate and change. An LED display shows the amount of credit entered. A cancel button can be pressed at any time and the machine will refund any unused credit.
 - a) Identify the 3 input devices. [3]
 - b) Identify the 3 output devices. [3]
 - c) Design a control program, in the form of a flowchart, using the components shown below. You may use the components more than once and you may have to do some things in parallel.



Extended writing section

Choose 3 out of the 5 possible topics. You are expected to write somewhere between half and a full page for each. You can write in sentences, or a list might be more appropriate for some questions.

- I. Copyright applies to all creative work such as plays, songs, films and photographs. Describe how ICT has such a powerful influence on the illegal use of copyrighted material. What can be done to limit the problem?
- 2. Write a short description of the following 3 different categories of websites:
 - a) Search engines (eg Google and Yahoo)
 - b) Social networking sites (eg Facebook and MySpace)
 - c) Shopping sites (eg Amazon)
- 3. What specification would you look for when buying a new mobile phone for personal use? Include technical details of each component and give reasons for your choice. Specify both hardware and software items.
- 4. Some say that the tablet PC, such as the Apple iPad is the future of personal computing. Write a short essay giving a balance of views on both sides of this argument. Finish with a conclusion as to whether you think this statement is true or not.
- 5. Many people share their personal data on the Internet.
 - a) What do we mean by personal data?
 - b) Give 2 benefits and 2 dangers of this practice?
 - c) What advice should be given to young people?

[15 marks each]

[Total marks 66]