GCSE

631/01

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY (DOUBLE AWARD)

A.M. FRIDAY, 6 June 2008

2 hours

ADDITIONAL MATERIALS

In addition to this paper you will need Resource Material for use with Question 7.

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. Where the space is not sufficient for your answer, continue the answer at the back of the book, taking care to number the continuation correctly.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

*Answer **all** questions in the spaces provided.*

Questions in this paper are based on the context of 'Jenny's Gym'.

1. Jenny Jones, the manager of *Jenny's Gym*, sometimes uses graphics in her documents. Using the words listed below, complete the table to show which feature would be **best** suited for the following tasks. Use each word only once.
The first one has been done for you. [3]

Crop   **Rotate**   **Flip**

	Task required	Best feature to complete the task
	Make a graphic bigger or smaller	*Resize*
(a)	Turn an object clockwise 90°	
(b)	Remove part of a photograph	
(c)	Make a mirror image of a graphic	

2. Jenny Jones uses multimedia to present training techniques to members. Tick **one** box in *each* case to show which *feature* would **best complete** the following tasks:

(a) Make a title fly onto the screen. [1]

☐ Annotation

☐ Animation

☐ Configuration

☐ Aviation

(b) Give the same basic appearance to all slides. [1]

☐ Slide background

☐ Front colour

☐ Template

☐ Logo

(c) Jump straight to another part of the slideshow. [1]

☐ Sort

☐ View

☐ Transition

☐ Hyperlink

(d) Insert a graphic of a speaker that will make a sound when clicked. [1]

☐ Action button

☐ Speaker button

☐ Mouse button

☐ Sound button

Turn over.

3. Staff members at *Jenny's Gym* have to use *standard ways of working* to help prevent accidents and
health problems caused through *using computers*. **Identify** the potential problems circled in the
pictures below, and give a *different* method of prevention for each. [5 × 2]

(a) Problem: ....

Prevention: ....

....

....

....

....

(b) Problem: ....

Prevention: ....

....

....

....

....

(c) Problem: ....

Prevention: ....

....

....

....

....

(d)   Problem: ....

 Prevention: ....

 ....

 ....

 ....

 ....

(e)   Problem: ....

 Prevention: ....

 ....

 ....

 ....

 ....

Turn over.

4. Jenny Jones keeps a list of members in a computer database. Part of this database is shown below.

Member No.	First name	Surname	Member Type	Health Problems	DOB
021	Daniel	Roberts	F	Yes	24/03/1964
053	Martin	Chambers	F	No	09/08/1975
565	Karen	Brooker	F	No	22/06/1976
661	Susan	Beaney	F	Yes	15/09/1979
429	Bhoj	Rashid	F	No	01/01/1982
641	Mared	Jones	J	No	17/02/1993
640	Sara	Jones	J	No	17/02/1994
516	Diana	Davies	J	Yes	10/11/1995
124	Michael	Morris	R	No	05/12/1980
221	Janet	Jeffries	R	No	03/10/1981

(a) State how many *records* are shown in the database above. .... [1]

(b) Give **one** reason why Jenny Jones would **add** a record. [1]

....

(c) Give **one** reason why Jenny Jones would **edit** a record. [1]

....

(d) Give **one** reason why Jenny Jones would **delete** a record. [1]

....

(e) State how many *fields* are shown in the database above. .... [1]

(f) Apart from *contact details*, suggest **one** additional field for this database. [1]

....

(g) Tick **one** box to indicate how this database has been sorted. [1]

☐ Surname then First name

☐ Surname then Member Type

☐ Member Type then DOB

☐ None of these

(h) The field *Member Type* is coded for different types of membership: F for full, R for restricted and J for junior. Give **two** benefits of using *coded data* in a database. [2]

(i) ....

(ii) ....

(i) Jenny Jones wants a list of junior members for a team competition. Write down the *field* and the *criteria* that would find **only** these records. [1]

....

(j) Jenny Jones wants a list of members who are over 40 on 01/01/2008 for a veteran's competition. Write down the *field* and *criteria* that would find **only** these records. [1]

....

(k) Jenny Jones wants to find all full members who have health problems. Write down the *fields* and *criteria* that would find **only** these records. [3]

....

....

....

(l) Give **one** *other* database that *Jenny's Gym* might have. [1]

....

(m) Give a suitable *input mask* for the *DOB* field. [1]

....

(n) (i) Apart from *input mask*, state **one** type of *validation* suitable for use in this database. [1]

....

(ii) Give **one** *example of use* for this type of *validation* within this database. [1]

....

(o) Give **two** advantages of using a computerised database. [2]

(i) ....

(ii) ....

5. *Jenny's Gym* calculates orders using a spreadsheet like the one below.

	A	B	C	D	E	F
1	**Item Description**	**Cost (£)**	**VAT (£)**	**Total Item Cost (£)**	**No of items ordered**	**Total (£)**
2	Mats	20.00	3.50	23.50	5	117.50
3	Performance monitor	75.00	13.13	88.13	5	440.65
4	Sets of weights	120.00	21.00	141.00	3	423.00
5	Exercise bench	60.00	10.50	70.50	2	141.00
6					**Total Order Cost**	**1122.15**
7	VAT rate	17.5%				
8	Funds available	£1,200				
9	Difference	£77.85				
10	Within budget?	Yes				

(a) State the *type of data* used in cell A2. .... [1]

(b) State the *type of data* used in cell B2. .... [1]

(c) State the *type of data* used in cell B8. .... [1]

(d) Give the *cell reference* of the cell that shows the rate of VAT. .... [1]

(e) Tick **one** box to show the *formula* used in cell F2. [1]

☐ = D2*E2

☐ = sum(B2:E2)

☐ = B2+C2+D2+E2

☐ 117.50

(f) Give the *formula* used in cell F5. [1]

....

(g) Give **two** *formulas* that could be used in cell F6. [2]

(i) ....

(ii) ....

(h)   Give the *formula* used in cell B9.   .... [1]

(i)   The formula used in cell C2 is = B2*B7.

    (a)   Give the **type** of *cell reference* used for B7.   [1]

    ....

    (b)   State **why** this type of *cell reference* has been used.   [1]

    ....

(j)   Tick **one** box to identify the *formula used* in cell B10.   [1]

    ☐   = IF(B9>=0, "YES","NO")

    ☐   = IF(B9>0, "YES","NO")

    ☐   = IF(B9<0, "YES","NO")

    ☐   = IF(B9<=0, "YES","NO")

(k)   Jenny Jones keeps a price list of items in a linked worksheet and uses a function to input the item cost automatically. Tick **one** box to show the *type of function* used to do this.   [1]

    ☐   IF STATEMENT

    ☐   MEDIAN

    ☐   LOGICAL

    ☐   LOOKUP

(l)   State **three** *other* purposes for spreadsheets that *Jenny's Gym* might use.   [3]

    (i)   ....

    (ii)   ....

    (iii)   ....

(m)   State **two** advantages of using computer spreadsheets.   [2]

    (i)   ....

    (ii)   ....

6. Customers can contact *Jenny's Gym* using *email*.

(a) Give a definition of *email*. [1]

....

....

(b) Jenny Jones gives email addresses to members of staff in the different branches of *Jenny's Gym*. James Ifan works in the Aberystwyth branch and has the email address: ifanjames.aberystwyth@jennysgym.co.uk [1]

Complete the *email* address for Sally George, who works in the Swansea branch:

.... @jennysgym.co.uk

(c) Give **three** *advantages* to Jenny's business of using email. [3]

Advantage 1: ....

....

Advantage 2: ....

....

Advantage 3: ....

....

(d) Give **one** *disadvantage* of using email. [1]

....

(e) Jenny Jones uses the *Internet* to promote her business. *Apart from email*, describe various ways she might use the *Internet* to promote *Jenny's Gym*. Use examples to illustrate your answer. [10]

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Turn over.

**When answering the following questions, you should refer to the '*Jenny's Gym*'
documents in the Resource Material.**

7. *(a)* All *Jenny's Gym* documents contain the *company logo*.

    (i) State the *purpose* of a *company logo*. [1]

    ....

    (ii) Give **four** *formatting features* used to create the *Jenny's Gym* logo. [4]

    Feature 1: ....

    Feature 2: ....

    Feature 3: ....

    Feature 4: ....

(b)   (i) Name the *type of document* shown as **Document 1**. [1]

    ....

    (ii) State the *purpose* of this document. [1]

    ....

    (iii) Apart from *features used to create the logo*, state **two** features used to create this
document. [2]

    Feature 1: ....

    Feature 2: ....

(c)   (i) Name the *type of document* shown as **Document 2**. [1]

    ....

    (ii) State the *purpose* of this document. [1]

    ....

    ....

    (iii) Give **five** *features* used in **Document 2** that have **not** been used in **Document 1**. [5]

    Feature 1: ....

    Feature 2: ....

    Feature 3: ....

    Feature 4: ....

    Feature 5: ....

(d) (i) **Document 3** is a membership application form. Give the general name given to documents that gather information. [1]

....

(ii) State **six** *features* used in **Document 3** that have **not** been used in **Document 1** or **Document 2**. [6]

Feature 1: ....

Feature 2: ....

Feature 3: ....

Feature 4: ....

Feature 5: ....

Feature 6: ....

(e) Apart from *documents* shown in the Resource Material, name **three other** standard business documents that *Jenny's Gym* might use, and give the *purpose* for **each**.

Type 1: .... [1]

Purpose: .... [1]

....

Type 2: .... [1]

Purpose: .... [1]

....

Type 3: .... [1]

Purpose: .... [1]

....

Turn over.

For continuation only.