



GENERAL CERTIFICATE OF SECONDARY EDUCATION
APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY (Double Award)
 ICT Knowledge and Understanding

4872

Candidates answer on the question paper.

OCR supplied materials:
None

Other materials required:
None

Monday 13 June 2011
Afternoon

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **100**.
- No marks will be awarded for using brand names of software packages or hardware.
- This document consists of **20** pages. Any blank pages are indicated.

Gill runs judo classes at the Kelmoor Youth Centre. She has been running these classes for nearly a year but she needs to attract more young people to come to the sessions.

1 Gill has produced the following poster (Fig. 1).

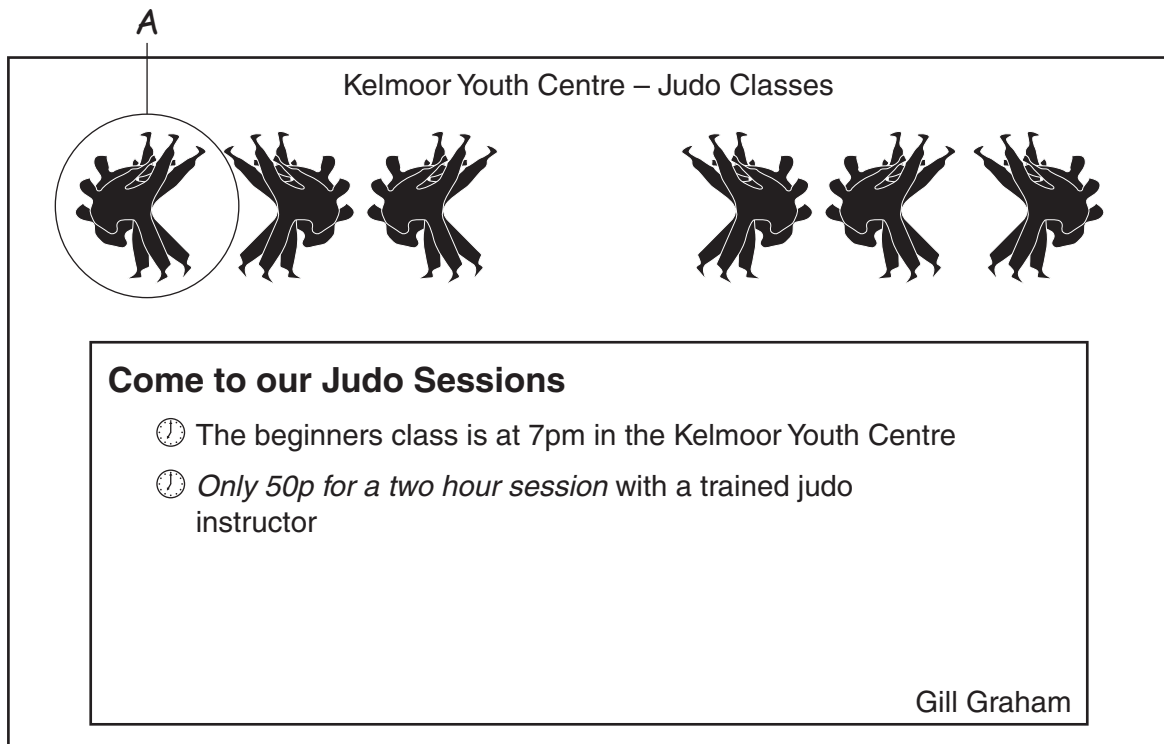


Fig. 1

(a) (i) Circle the following features on the poster and label them as shown in the table below. You should only label **one** example for each feature.

The first one has been done for you as an example.

Label	Feature
A	image
B	right justified text
C	italic text
D	bullet
E	bold text
F	centred text

[5]

- (ii) Fig. 2 shows two items that could be changed to improve the appearance of the poster. These are labelled A (text) and B (frame).

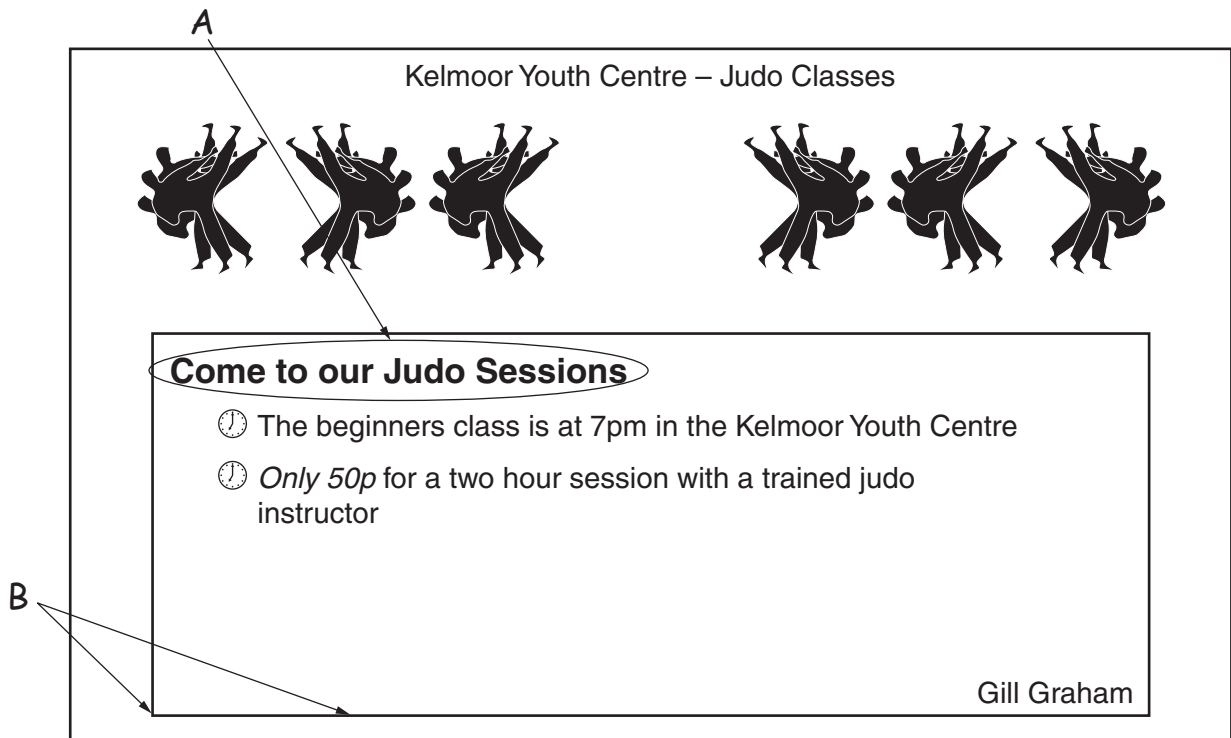


Fig. 2

Complete the table below stating how each item could be changed.

For each change, state how it would improve the appearance of the poster.

Item	How the item could be changed	How the change would improve the appearance of the poster
A (text)		
B (frame)		

[4]

2 When a new person comes to a session Gill asks them for their details. She enters their details into a relational database of members. Fig. 4 below shows part of a table from this database.

Membership number	Last name	Forename	Gender	DOB	Email	Ability
001	Walker	Jill	F	06/05/97	jill4.walker@allo.com	advanced
002	Ghannoum	Mustafa	M	12/11/96	m.ghannoum@fastmail.co.uk	advanced
004	Burle	Steven	M	24/10/96	burlefamily@abcinternet.com	advanced
005	Broadhurst	Marie	F	23/04/97	broadhursts@abcinternet.com	intermediate
006	Garner	Kylie	F	05/01/96	theoneandonlykylie@allo.com	intermediate
008	Hollingsworth	John	M	23/10/95	j.holly23@fastmail.co.uk	beginner
010	Rielly	Pauline	F	14/03/96	rielly.paul@chessing.ac.uk	intermediate
013	Milner	Christopher	M	12/10/96	milnersall@fasternet.co.uk	advanced

Fig. 4

(a) (i) How many fields are shown in Fig. 4?

..... [1]

(ii) How many records are shown in Fig. 4?

..... [1]

(b) Membership numbers are inserted automatically by the database software.

(i) Explain the purpose of the **Membership number**.

.....

 [3]

(ii) The database has been sorted by **Membership number**.

Explain why there are no entries for Membership numbers 003, 007, 011, and 012.

.....

 [2]

(c) Gill has set validation rules for some of the fields in the database.

(i) What is the purpose of setting a validation rule?

.....
.....
.....
.....
.....
..... [3]

(ii) Explain how you could set up validation for the DOB (date of birth) field.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
..... [5]

(d) When using the relational database Gill makes full use of the following features:

sort search reports forms

Explain the purpose of each of these features, using examples from the club's database.

(i) sort
.....
.....
.....
.....
..... [3]

(ii) search
.....
.....
.....
..... [3]

(iii) reports
.....
.....
.....
.....
..... [4]

11
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- 4 Gill has decided to organise a Judo Display. Harry has been put in charge of organising the ticket sales. He has decided to use spreadsheet software to record the sale of the seats. He has set up a spreadsheet which shows the layout of the seats in the hall as shown in Fig. 5. Seats are priced at £1.75 (child) and £2.75 (adult).

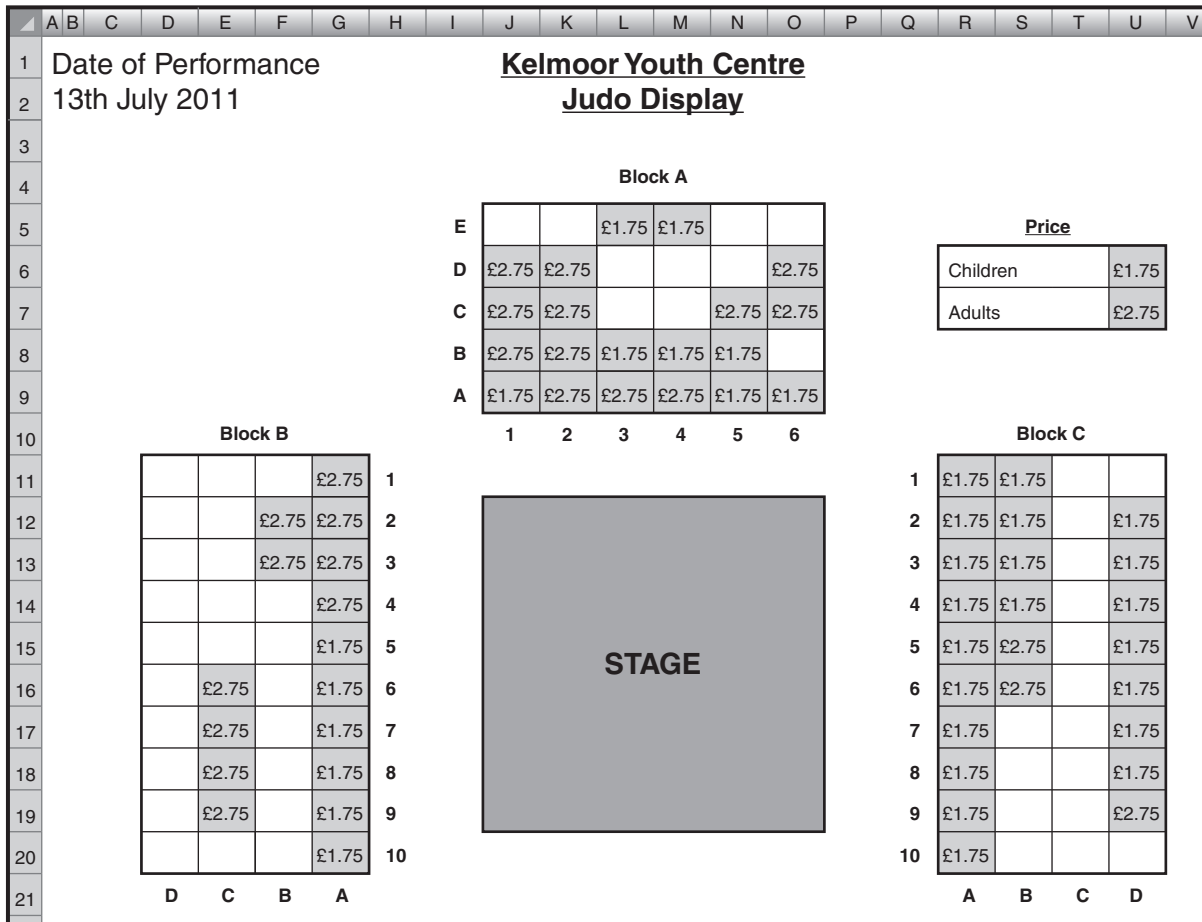


Fig. 5

(b) The day before the Judo Display the sale of tickets in Block A is as shown in Fig. 6.

	I	J	K	L	M	N	O	P
1	Kelmoor Youth Centre							
2	Judo Display							
3								
4	Block A							
5	E			£1.75	£1.75			
6	D	£2.75	£2.75					£1.75
7	C	£2.75	£2.75			£2.75	£2.75	
8	B	£2.75	£2.75	£1.75	£1.75	£1.75		
9	A	£1.75	£2.75	£2.75	£2.75	£1.75	£1.75	
10		1	2	3	4	5	6	

Fig. 6

Harry wants to view the amount of money taken in ticket sales for each row in Block A. He will do this by entering formulas in cells P5 to P9.

(i) State the most efficient formula that should be entered in cell P5.

..... [2]

(ii) Describe the most efficient method that Harry can use to enter similar formulas in cells P6 to P9.

.....

 [3]

- (c) Harry wishes to be able to keep his spreadsheet for future events. He is concerned that, if his computer breaks down, he might lose his work.

Explain how Harry could make sure that he still has a copy of his spreadsheet, even if his computer breaks down.

.....

.....

.....

..... [2]

5 (a) Harry's computer system includes both hardware and software.

(i) What is meant by the term hardware? Give **one** example.

Hardware

.....

Example [2]

(ii) What is meant by the term software? Give **one** example.

Software

.....

Example [2]

(b) The table below shows some of the items that make up Harry's computer system.

Place **one** tick in each row to show whether the item is an input, output, processing or storage device.

The first row has been completed for you as an example.

Item	Input	Output	Processing	Storage
Keyboard	✓			
Ink jet printer				
Trackerball				
DVD drive				
ROM				
Monitor				
Mouse				
CPU				

[7]

6 To buy tickets for the Judo Display, customers had to go to Kelmoor Youth Centre on a specific day. Harry is considering other booking methods for future events.

(a) One of these methods is booking tickets by email.

Give **one** benefit and **two** drawbacks of using email to book tickets.

Benefit

Drawback 1

Drawback 2 [3]

7 Harry has been spending long hours working on his computer. The Health and Safety (Display Screen Equipment) Regulations, 1992 exists to ensure people work safely with computers.

(i) Do the regulations apply to students using computers in schools?

Tick the appropriate box below:

Yes No

[1]

(ii) The Regulations sets out the safety requirements for work stations.

For each of the following, give **two** features that make them safer to use.

chair

1

.....

2.....

.....

keyboard

1

.....

2.....

.....

screen

1

.....

2.....

.....

[6]

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