



GCE MARKING SCHEME

SUMMER 2016

**APPLIED ICT
1641/01**

INTRODUCTION

This marking scheme was used by WJEC for the 2016 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCE APPLIED ICT
SUMMER 2016 MARK SCHEME

AICT 1 Summer 2016.

1. (a) *Name the type of organisation that best describes Parkview Pet's Pals.* [1]
Leisure and Tourism

(b) *Identify one stakeholder of PPP and describe the relationship between the stakeholder and the business.* [1 + 1]
Customers - they want the company to provide a safe pet sitting service
Pet sitters - they rely on the company for their income
Office staff - they rely on the company for their income
Employees - they must provide a good service for company to survive

[Question total 3]

2. (a) *Using a relevant example, distinguish between data and information.* [1 + 1]
Data is 3; information is customer has 3 dogs.
Any relevant and correct example.

(b) *Describe how a relational database could be used to manage customers' pet sitter bookings.* 2 x [1 + 1]
Use of three or more tables. Customer, Pet Sitter and Bookings.

Use of enforced relationships between tables to avoid duplication, redundancy.

Use more than one table in a query to relate data tables.

[Question total 6]

3. *Identify three principles of the data protection act and explain how PPP can ensure that it complies with the law.* [3]

There are no marks for stating the principles. In each case one mark for identifying what PPP should do.

1. Personal data shall be processed fairly and lawfully
All processing must comply with all principles of the Act
2. It must only be held and used for the reasons given to the Information Commissioner.
PPP can only use the data for the purpose registered with the Information Commissioner
3. The information held must be adequate, relevant and not excessive
PPP must not ask customers or pet sitters for information that is not needed such as income etc
4. It must be accurate and be kept up to date.
PPP must check with customers and pet sitters whether the information they hold is correct on a regular basis.
5. It must not be kept longer than is necessary for the registered purpose.
PPP should delete pet sitters information when they no longer work with the company.
PPP should have a policy on deleting customer books after they have not book for x amount of time.
6. Personal data shall be processed in accordance with the rights of data subjects
Customers and pet sitters have a:
 - right to access a copy of the information held
 - right to object to processing for direct marketing
 - right, in some circumstances, to have inaccurate information corrected
 - right to compensation for damages caused by breach of the act.
7. The information must be kept safe and secure.
PPP must ensure that all data is secured using logons, access rights, firewalls and encryption.
8. The files may not be transferred outside of the European Economic Area (that's the EU plus some small European countries) unless the country that the data is being sent to has a suitable data protection law.
PPP should be aware of this and must take care when communicating with customers who are abroad.

[Question total 4]

4. *Describe two methods that PPP could use to back up the data held within its computer systems.* 2 x[1 + 1]

Named method + description

Examples:

Differential/full backups - the whole system would be backed up on each occasion a backup was run

Incremental backups - initially the whole system is backed up and then only files that have been altered since the last backup will be copied.

Mirror backup - straight copy of files at any instant/faster as no compression.

[Question total 4]

5. *Complete the diagram to show the information flows that take place in the booking process.* [5]

See page 6 for correct diagram

All flows/entities correct - 5 marks

8 or 9 flows/entities correct - 4 marks

6 or 7 flows/entities correct - 3 marks

4 or 5 flows/entities correct - 2 marks

3 flows/entities correct - 1 mark

2 or less flows/entities - 0 marks

[Question total 5]

6. *Identify two appropriate methods of communication, other than phone calls, that could be used to keep in touch with the pet sitters. Describe the advantages of each method.* 2 X [1+1]

Method + Advantage

Examples:

Email - emails are delivered instantly and can be read by the pet sitter at a later date (do not have to be there)/a permanent record of the communication

Text message - arrive on the pet sitters phone and will alert the pet sitter on arrival. They are an efficient method of communication for brief messages. Can keep a record of when sent and content.

[Question total 4]

7. *Identify a technology that could be used to allow customers to communicate with their pet and explain the advantages and disadvantages of the chosen technology.*

[1]

Technology - video conference/Skype

Any 3 of:

Advantages:

Can see each other/body language as well as speech/see pet to make sure it is well

[3x1]

Can download apps to phone or tablet so very versatile (Mac or android)

Disadvantages:

Needs an internet connection/dedicated phone connection

Time delays depending on infrastructure

Quality of sound

[Question total 4]

8. *Explain, using relevant examples, how PPP could use a management information system (MIS) to help improve the pet sitting business.*

2 x [1+1]

Feature + example

Examples:

Identify strengths and weaknesses using reports from the MIS

Get an overall picture of the company to see if changes are needed

Identify trends such as busy times of year/bookings turned away because of lack of sitters

Support decisions such as expansion of the service/introduction of new services.

[Question total 4]

9. *Identify appropriate advanced features of a spreadsheet package and explain how they could be used to automate the calculation process.*

The use of features and functions such as

- VLOOKUP
- HLOOKUP
- IF statements
- values pulled from sheet to sheet
- input forms
- saved input
- pivot tables/charts
- etc

Explanations of automation such as:

- appropriate use of LOOKUPS
- use of macros
- use of VBA
- validation routines
- conditional formatting

Candidates give a clear, coherent answer fully and accurately describing the features and functions chosen. They are able to suggest sensible uses for their chosen features and functions and are able to explain automation fully with sound use of technical vocabulary.

7 marks

Candidates describe a range of features and functions although some many not be advanced in nature. They can suggest some sensible uses for the features and functions. There is a brief explanation of automation but responses demonstrate the use of some technical vocabulary.

5 – 6
marks

Candidates list a range of features and/or functions not all are advanced and examples of use are limited. They give some brief explanation of automation. The response lacks clarity and there are some errors in spelling, punctuation and grammar.

3 – 4
marks

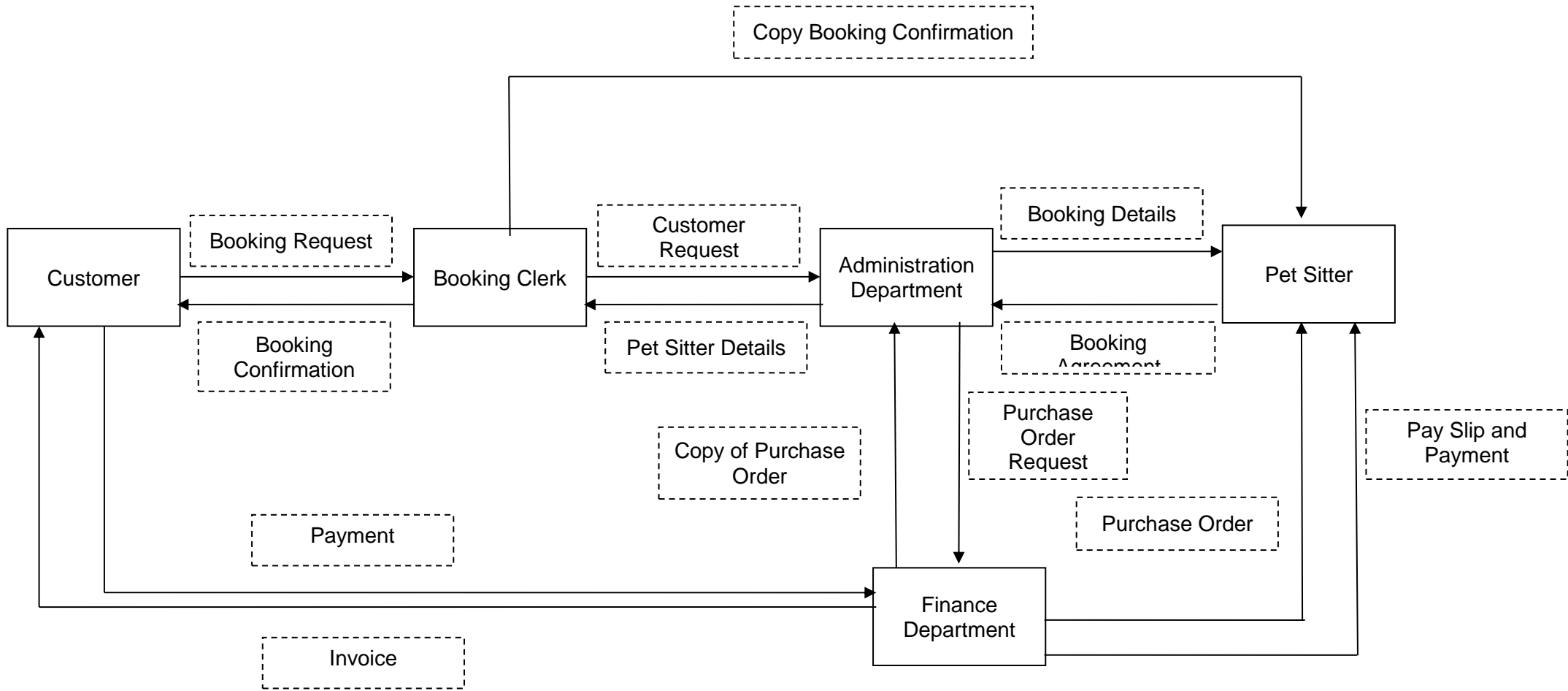
Candidates list some of features and/or functions not few are advanced and examples of use are limited, not sensible or missing. They give some idea of automation. The response lacks clarity and there are significant errors in spelling, punctuation and grammar.

1 - 2
marks

No appropriate response

0 marks

[Question total 7]



AICT 1 Part B Marking scheme	
Description: Part 1b (5 marks)	Mark

Task 1	
Description: Part 1a (8 marks)	Mark
Create a database to store the given data Using sensible file name only (not db1)	1
Import the data	1
Use 2 tables	1
One-to-many relationship On customer code	1
Integrity enforced (follow through)	1
Customer table Append/Make table query – 2 OR Table created by deletion – 1	2
Booking sent – Yes/No	1
Task 1 a – Total Marks	8

AICT 1 Part B Marking scheme	
Description: Part 1b (5 marks)	Mark
Create form - Customer	
.. with sub form (1) – Customer Correct sub form (2)	2
Insert suitable title	1
Insert logo and resize to 4 cm x 2 cm	1
Record Operation Buttons (min 2)	1
Task 1 b– Total Marks	5

Description: Part 1c (21 marks)	Marks
Create query Paid = no	1
Calculated field Service Cost of course 1 name 1 calculation [No of nights]*35	2
Calculated field Additional Cost 1 name 1 calculation [No of dogs] * 2.5	2
Calculate payment date 1 name 1 calculation [Start date] – 14	2
Calculate Total Cost [Additional Cost]+[Service Cost]	2
Total Cost currency	1
BOOKING CONFIRMATION – Company Name & Address & on every page	1
Logo & Date on every page	1
Customer details 1 mark – data 1 mark - layout	2
5 fields Start date, no of dogs, no of nights, total cost, payment date	2
2 marks for all 5 fields 1 mark if minor error	
4 sentences	1
Formatting max 2 marks 1 mark no additional information Total cost and payment date in appropriate place 1 mark	2
Correct page break	2
Task 1c: Total Marks	21

Description: Task 1d (6 marks)	Mark
Database could be improved by the inclusion of validation as this ensures that sensible data is entered into the system. It will help limit data entry errors.	2
Validation type explanation of how it will be applied (type 1 mark) (explanation (1 mark)	2
Validation type explanation of how it will be applied (type 1 mark) (explanation (1 mark)	2
Task 1 d- Total Marks	6

Task 2	
Description Task 2 (20 marks)	Mark
Create two pages 'about us' and 'contact us'	1
Insert titles – about us and contact us	1
Insert logo on each page	1
Create links between pages 2 marks no broken links -1 per broken link	2
About us page Insert text and image 1	1
About us page Insert price list (1 mark) Formatted (1 mark)	2
About us page Rollover image (image 2 and image 3) (2 marks) Both images 1 mark	2
About us page Hyperlink rollover image	1
Contact us page Sub heading	1
Change sub heading background colour	1
Form with space for name, contact number, contact time	1
Choice – radio buttons or list box Service type – dog walking , puppy visits, dog sitting	1
Submit button	1
Quality of layout	4
Task 1 d- Total Marks	20
Total Marks for paper (part b)	60