GCE AS MARKING SCHEME

SUMMER 2018

AS (NEW)
APPLIED ICT - AICT1
2535U10-1

INTRODUCTION

This marking scheme was used by WJEC for the 2018 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.

WJEC AS APPLIED ICT - AICT1

SUMMER 2018 MARK SCHEME

PART A

① (a) *Name two secondary sources that could be used to gather relevant information.*

2 x [1]

Information from the web sites of similar businesses
Companies' published annual reports to identify profitable activities
Brochures for activity camps

(b) *Describe two advantages of using primary sources rather than secondary sources to carry out market research*

2 x [1 + 1]

Data will be relevant whereas secondary data may have been gathered for a different purpose.
Data will be up to date (1 mark only)
Reliability of data can be double checked with the source
Ability to ask follow up questions for greater clarification

[Question total 6]

② (a) *Describe the role and function of an Internet Service Provider*

2 x [1]

An ISP is a business/organisation that provides/charges users with services that allow them to access and use the Internet.

2 x [1]

(b) *Identify two services typically provided by an ISP*
search engines
email addresses
newsgroups
web space
Technical support

(c) *Explain the structure of a universal resource locater (URL)*

2 marks for all 3

               http://bbc.co.uk/news
http – protocol
bbc.co.uk – server
news - resource

1 mark for two of three

[Question total 6]

③   (a)   Using an appropriate example, explain what is meant by   [2]
                     malicious damage to data.
                     Examples:

External entity (hacker) gaining access to the system and
corrupting or deleting data

Employee with a grievance against the business may delete
or alter data

A virus introduced to the system via an email attachment
may delete or corrupt data

     (b)   *Using an appropriate example, explain what is meant by*   [2]
                     accidental damage to data.
                     Examples:

Natural hazards such as fire or flooding

Damage to data because of hardware failure or user error

[Question total 6]

④   *State the meaning of the term cybersecurity and describe steps that*   3 x[1]
     organisations should take to protect their data against cyber attack.

Cybersecurity refers to preventative methods used to protect
information from being stolen, compromised or attacked.

It requires an understanding of potential information threats, such
as viruses and other malicious code.

Cybersecurity strategies include identity management, risk
management and incident management.

Firewalls to prevent hacking attacks.

Employ 'white hat hackers'
Carry out penetration testing

Encryption of data

[Question total 3]

⑤   *Describe two features of a database package that would be helpful*   2 x[1 + 1]
     in handling personal information and details of bookings

Named feature + description
Examples:
Able to use relationships to avoid the duplication of data – one child
may have several bookings but personal details are only stored
once
Able to use queries to produce lists/groups of children who wish to
take part in a activity.
    Produce paper-based reports from queries that can be used on
   the day – as registers

[Question total 4]

⑥   (a)   *Describe the benefits of the use of a computer network to a business in terms of efficient working.*   4 x[1]
Sharing resources such as software/hardware
Ability to share/access data
Collaborative working
Effective communication

     (b)   *Explain how a network manager could manage and monitor the use of the computer network*

User accounts that limit access to resources   2 x[1]
Provide levels of access/different views of data
Limit access times to ensure that data cannot be accessed without supervision
Log users activity to monitor use of data and resources

[Question total 5]

⑦   *Information Flow*

All correct – 5 marks
8/9 correct – 4 marks
6/7 correct – 3 marks
4/5 correct – 2 marks
3 correct – 1 mark

[Question total 5]
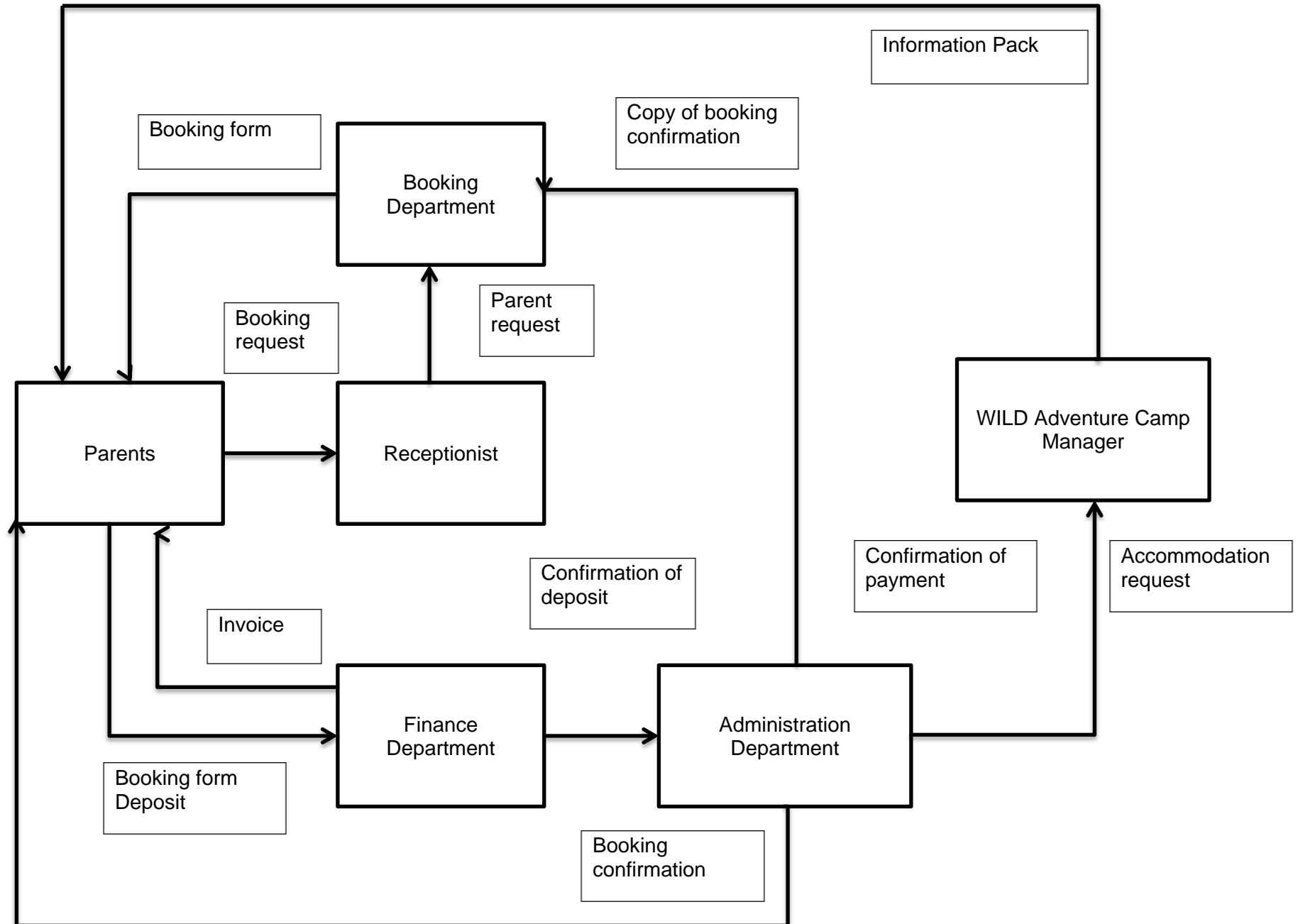
⑧ *Describe the technologies that could be used to allow the children and young people to contact their families. Give the advantages and disadvantages of each technology you describe.*

Technology + advantage + disadvantage

Examples:
Video calling

Mobile phone

Social networking

Instant messaging/images

5 - 6 marks

Candidates give a clear, coherent answer fully and accurately describing the advantages and disadvantages of each technology identified. The candidate makes good use of technical terminology and presents arguments clearly.

3 - 4 marks

Candidates describe features/facilities of the chosen technology and can suggest a limited range of advantages and disadvantages of the technology.

1 - 2 marks

Candidates simply list a range of technologies or give a brief explanation of advantages and/or disadvantages of its use. The response lacks clarity and there are significant errors in spelling, punctuation and grammar.

0 marks

No appropriate response

[Question total 6]

PART B

Task 1a: Sales	
Description: Part a (12 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 Camp ID	1
Integrity enforced (follow through)	1
Camp table (7 records) Append/Make table query – 2 OR Table created by deletion – 1	2
Validation in Camp table Input mask – Camp ID Lookup/list check – Focus Range check - Capacity	3
Payment received – Yes/No	1
Contact Number text	1
Task 1 a – Total Marks	12

Task 1b: Sales - Part b (22)	
Description	**Marks**
Create query Paid = no 2 tables 1 mark Criteria 1 mark Operator 1 mark	4
Calculated field Booking Cost 1 mark - name 1 mark - calculation [No of children]*150	2
Booking Cost currency	1
Invoice – Company Name & Address & on every page	1
Logo & Date on every page	1
Customer details 1 mark – data 1 mark – layout	2
Calculate Discount 1 mark – name; 1 mark – IFF; 1 mark - criteria true; 1 mark - criteria false	4
Calculate Amount due 1 mark - name 1 mark - calculation [booking cost]-[discount]	2
"Thank you for your booking please ensure prompt payment" Footer On every page 2 marks On one page 1 mark	2
Quality of layout	1
Correct page break	2
Task 1c: Total Part b (22)	22

Part c - Total Marks (6)	
Description	Mark
Identify the relationships between the three tables (Can be ERD diagram) link table with relationship one to many	2
identify the primary key for the additional table (combined key 2 marks) (unique key 1 mark)	2
explain how the additional table makes the database more efficient/less duplication 1 mark Expansion 1 mark	2
Task 1 d- Total Marks	6

Task 2 Sales & Marketing (20)	
Description	Mark
Create two pages 'about us' and 'make an enquiry'	1
Insert titles – about us and make an enquiry	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 camp list (1 mark) Formatted (1 mark)	2
About us page Rollover image (image 2 and image 3) (2 marks) Both images 1 mark	2
Contact us page Sub heading	1
Change sub heading background colour	1
Form with space for name, contact number,	1
Choice – radio buttons 1 mark list box 1 mark	2
Submit button	1
Slogan	1
Quality of layout	3
	20