GCE AS MARKING SCHEME

SUMMER 2019

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

INTRODUCTION

This marking scheme was used by WJEC for the 2019 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 2019 MARK SCHEME

PART A

①	*Describe two benefits of extending an existing network for additional users rather than installing a second network.*	2 x[1 + 1]

Benefit + expansion
Efficient use of software and hardware resources such as shared printers
Data access and sharing between the two arms of the business
Collaborative working with staff such as HR and administration
Effective communication within the office
Need only manage/monitor users on one network, improved security and data.

[Question total 4]

②	*Complete the diagram to show the room letting process.*	[5]

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

Please see page 5 for completed diagram.

[Question total 5]

③	*Describe two advantages of using a relational database to store information about the students and the HMO's.*	2 x [1 + 1]

Feature/function + description
- Use of relationships to reduce data entry/data duplication
- Forms and sub forms to display property/student details with list of residents/rooms
- Queries – to find occupants of a certain property
- Reports – rent requests to residents of a certain property

[Question total 4]

1

④   *(a)*   *Describe the purpose of cryptography.*   [2]

- Makes data in a computer system unintelligible through encryption (scrambling)
- Data will appear to be meaningless to anyone gaining unauthorised access to the data.
- Encryption provides security for data both when stored electronically and when transmitted between computer systems

(b)   *Describe what is meant by biometric security*   [2]

- A security system that automatically checks a unique biological characteristic (finger print, retina, voice, iris etc) of an individual that is measured by a special scanner

[Question total 4]

⑤   *Explain the advantages of using an 'off-the-shelf' specialised accounting package rather than developing a spreadsheet in-house.*

- Cheaper. The development costs are spread across many users, so you pay much less than it would cost to build the same software from scratch.
- Immediate availability. The development work has already been done, so all you need to do is set up the software and start using it.
- Lower training costs. There may be pre-existing training materials and courses that you can leverage.
- Community support. If the software is popular, there may be books, articles, forums and online communities offering support and advice to help you learn or resolve any issues.
- More functionality. Off-the-shelf software often has more functionality, because the developers try to meet the requirements of as many users as possible.
- Upgrades. The vendor will continue to develop the software, so you will likely get upgrades for free or at a reduced cost, whereas in bespoke software you don't get anything new unless you pay for it to be built.

Up to 2 marks for a description of a relevant advantage.
One mark for the identification of an advantage to maximum of 2 marks overall.

[Question total 4]

⑥   *(a)*   *Explain what is meant by the term Big Data*   [1]

- extremely large data sets that may be analysed computationally
- to reveal patterns, trends, and associations, especially relating to human behaviour and interactions.

(b)   Describe what is meant by the term Data Mining   3 x [1]

Data mining is the process of sorting through large data sets
- to identify patterns and establish relationships
- to solve problems through data analysis.
- to turn raw data into useful information such as patterns and trends
- to develop more effective marketing strategies.

[Question total 5]

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⑦   *Describe how the facilities of an email package can be used to*   [4]
contact the students effectively

- set up a group in the email address book which can be used to send an email to all students at once   2 x [1+1]
- send attachments with an email such as copies of
  - contracts
  - invoices for rent
  - reminders for unpaid rent
- can request received and read confirmations to know that the student has read the email.

[Question total 4]

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⑧   *Explain the role and structure of a universal resource locator (URL)*
using http:// www.prospect_lettings.co.uk/rooms *as an example.*

Uniform Resource Locator, a URL represents the global web
address of documents, including web pages or image files (1)

- http – protocol that can be used to reach a particular document or file (1)
- prospect_lettings – the domain name is the name of the web site (1)
- rooms – folder structure to the page you need or the page you need (1)

[Question total 4]

⑨   *Web browser software is used to display web sites from the world wide web.*

Describe the purpose and function of a web browser.

- A web browser is a piece of software that is used to view and download the content of webpages.
- It translates the HTML pages to display various types of files such as text, audio, video and graphics.
- There is a common standard for how this should be done.
- They provide users with a graphical interface to explore the web.
- Most browsers have standard features, but different web browsers show things in slightly different ways.
- Web browser uses hyperlinks to display the resources and allow the users to navigate their browsers according to the resources.
- Web browser defines the application software (plug-ins)that is designed for the user to access and retrieve the documents using the Internet.

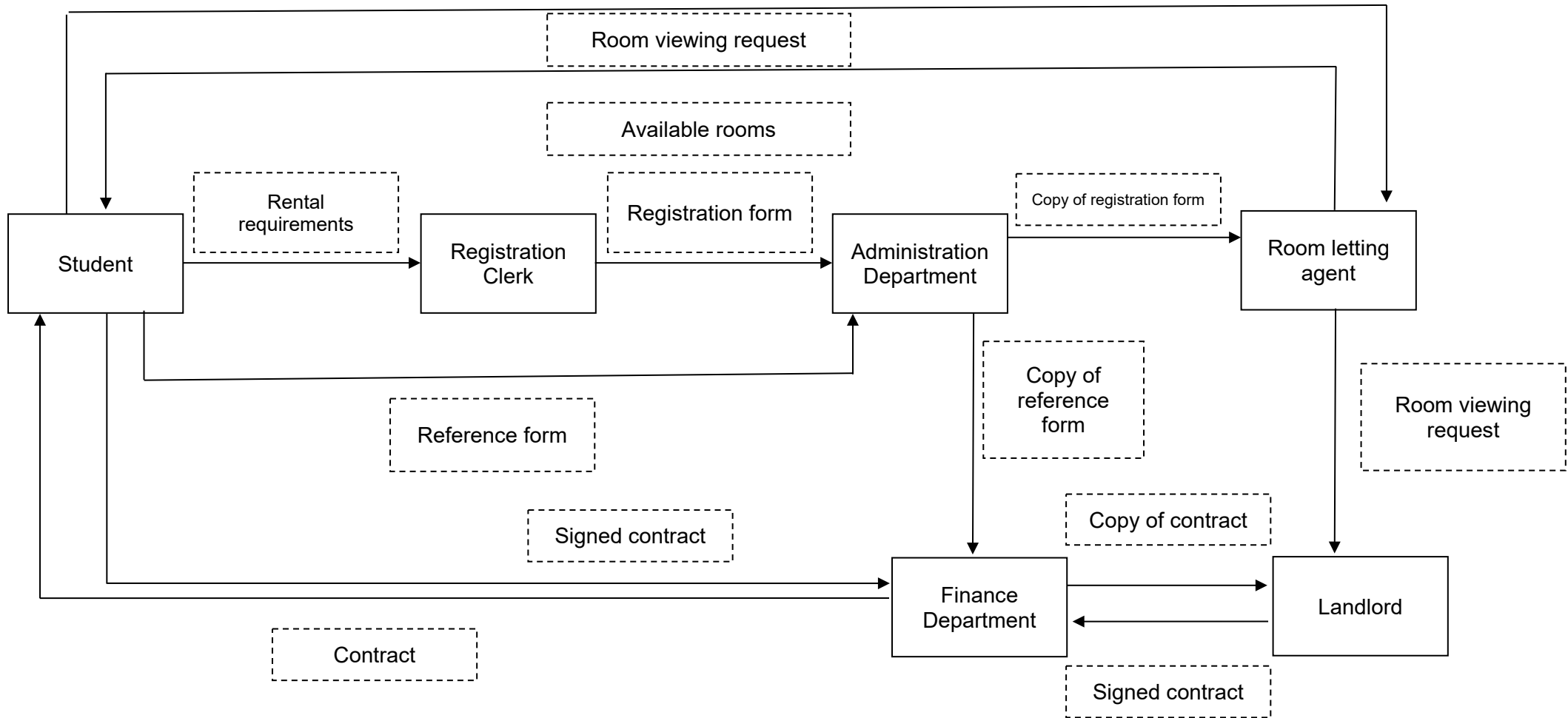|	
Candidates give a clear, coherent response to the question. They identify a web browser as a software application that retrieves and displays documents and files from across the Internet. They discuss the use of HTML to format the pages and the use of plug ins to run content. They make sound use of technical vocabulary.	6 marks
Candidates identify a web browser as a software application that retrieves and displays documents and files from across the Internet. They discuss the use of HTML to format the pages and the use of plug ins to run content. They make sound use of technical vocabulary.	4–5 marks
Candidates identify a web browser as a software application that retrieves and displays documents and files from across the Internet. They mention the use of HTML. Their responses demonstrate the use of some technical vocabulary.	2–3 marks
Candidates identify a web browser as a software application. They are able to describe some of the functions of a web browser. The response lacks clarity and there are some errors in spelling, punctuation and grammar.	1 mark
No appropriate response	0 marks

4

Completed flowchart for Q2.

Task 1 Marketing - Part a	
Description	Marks
Create worksheet April Rent	1
Import the data	1
Merge and centre	1
VLOOKUP(,'Landlord Details'!A1:D6,2) 1 mark VLOOKUP(,'Landlord Details'! A1:D6,2,FALSE) 2 marks	2
VLOOKUP(,'Landlord Details'! A1:D6,3) 1 mark VLOOKUP(,'Landlord Details'!A1:D6,3,FALSE) 2 marks	2
VLOOKUP(,'Landlord Details'! A1:D6,4) 1 mark VLOOKUP(,'Landlord Details'!A1:D643,FALSE) 2 marks	2
F8 today() 1 mark Displayed as Long Date 1 mark	2
=COUNTIF('April Rent'!A:A,Remittance!C9)	2
=SUMIF('April Rent'!A:A,C9,'April Rent'!D:D)	2
Fee total =G11*0.1	1
=IF(C14="yes",50)	2
=G11-G12-G13	1
Task 1 (a) - Total Marks	**19**

Task 2 (a): Sales	
Description: Part a (11 marks)	Marks
Create a database to store the given data Using sensible file name only (not db1)	1
Import the data (36 records)	1
Use 2 tables	1
One-to-many relationship On Property	1
Integrity enforced (follow through)	1
Property table (10 records) Append/Make table query – 2 OR Table created by deletion – 1	2
Validation in Room table Input mask – Room Code LL00L Lookup – Size (double/single) Cost Per Month– range check	3
Available– Yes/No	1
Task 2 (a) – Total Marks	**11**

6

Part b	
Description	Marks
Create form - Rooms No mark .. with sub form (1 mark) – Property Correct sub form (2 marks) 2 mark	2
Insert suitable title 1 mark	1
Insert logo 1 mark	1
Task 1 (b) - Total Marks	**4**

Part c	
Description	Marks
Create query Available = yes 2 tables 1 mark Criteria 2 mark between 300 and 450 Operator 1 mark	5
Calculated field Deposit 1 name 1 calculation [Cost per month]*3	2
Calculated field Agent Fee 1 name 1 calculation [Cost per month]*0.2	2
Deposit and Agent Fee currency	1
Property Availability, Company Name & Address & on every page	1
Logo & Date on every page	1
Property details 1 mark – data 1 mark – layout	2
Room details 1 mark –data 1 mark -layout	2
Calculate Amount Payable 1 name 1 calculation [Deposit]-[Agent Fee]	2
Correct page break (4 properties)	2
Task 1 (c) - Total Marks	**20**

Part d		
Description		Marks
Feature – 1 mark, Feature explained – 1 mark Benefits to organisation/user 1 mark		3
Feature – 1 mark, Feature explained – 1 mark Benefits to organisation/user 1 mark		3
Task 1 (d) - Total Marks		**6**