GCE AS MARKING SCHEME

SUMMER 2022

AS
APPLIED ICT - AICT1
2535U10-1

INTRODUCTION

This marking scheme was used by WJEC for the 2022 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 2022 MARK SCHEME

Part A

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1. (a) *Describe the advantages of using interviews to gather data from existing customers.* [2]

   1 mark for each advantage up to a maximum of two

   Interviews:
   - are useful to obtain detailed information about personal feelings, perceptions and opinions
   - allow more detailed questions to be asked
   - usually achieve a high response rate
   - respondents' own words can be recorded
   - ambiguities can be clarified, and incomplete answers followed up
   - interviewees are not influenced by others in the group
   - some interviewees may be less self-conscious in a one-to-one situation.

   (b) *Name **one other** primary method of collecting date from existing customers and give **one** advantage of using this method.* [2]

   Name (1) plus advantage (1)
   - Observation –
     - Very direct method for collecting data or information
     - Data collected is very accurate in nature and also very reliable
     - Problem of depending on respondents is decreased.
     - Observations can be made for a longer duration of time.
   - Questionnaires –
     - are relatively easy to analyse
     - a large sample of the given population can be contacted at relatively low cost
     - should be simple and quick for the respondent to complete
     - are usually straightforward to analyse
     - can be used for sensitive topics which users may feel uncomfortable speaking to an interviewer about
     - respondents have time to think about their answers.
   - Online forms -
     - can be sent out relatively swiftly and turnaround can be relatively short
     - users get time to consider responses
     - low costs
   data is already in electronic format making analysis easier

   [Question total 4]

| 2. | *Describe **two** features of a word processing package that could be used to present the completed analysis of the data collected from primary sources.* | 2 x [1 + 1] |

Feature + description
- Formatting text
  - Use of bold / underline / capitalisation
- Formatting paragraphs
  - Line spacing
  - Alignment – left / centre/ right / justified
  - Space before / after paragraph
- Tables
  - Columns and rows
  - Insertion of formulae
  - Alignment of text in cells – vertical / horizontal
- Use of SmartArt to create objects hierarchy charts / flowcharts / timelines
- Insertion of objects from other applications
  - Graphs / images / tables of data

[Question total 4]

| 3. | *Describe **two** ways an organisation can use the Internet to raise awareness of its operations and future plans.* | [4] |

1 mark for each correct response plus one for expansion up to a maximum of four.

To publicise existing events and describe proposals for the new markets:

- Use social media linked to local groups / local area
- Use listing services that will produce details of organisation when local searches are carried out
- Start a blog giving details of existing markets and proposals for development
- Upload multimedia on video sharing sites
- Use search engine optimising services to promote the organisation in Internet searches
- Join a relevant online community and contribute
- Build a website promoting the market using web authoring tools.

[Question total 4]

4. (a) *Using relevant examples, explain the difference between open and closed questions.* 2 x [1 + 1]

Closed questions
- Questions that only require a simple answer such as yes or no, true or false, or a choice from a closed list of options.
- For example:
  - Do you produce:
    - Meat
    - Cheese
    - Bread
    - etc

Open questions
- questions that require an expanded or detailed response that provide extended information
  - For example:
    - Describe your approach to producing organic products

(b) *Describe how responses to closed questions can be analysed* [1 + 1]

Method plus expansion

- Numerical model – assign values to closed options to aid analysis. The results can then be graphed / presented in a table

Responses can be collated in a spreadsheet and COUNTIF function can be used to calculate totals. These totals can be tabulated or graphed.

[Question total 6]

5. *Describe **three** methods of penetration testing.* 3x [1 + 1]

Method + description

Penetration testing strategies include:
- targeted testing – testing carried out by the committee's members and the penetration testing team working together
- external testing, to find out if an outside attacker can get in and how far they can get in once they have gained access
- internal testing, to estimate how much damage a dissatisfied committee member could cause
- blind testing, to simulate the actions and procedures of a real attacker by severely limiting the information given to the team performing the test.

[Question total 6]

6.   *Describe the difference between HTTP and HTTPS*   2

- HTTPS encrypts an HTTP message prior to transmission and decrypts a message upon arrival.
- https stands for Hypertext Transfer Protocol over Secure Socket Layer or HTTP over SSL.
- In this SSL acts as a sub layer under regular HTTP application layering.

[Question total 2]

7. (a)   *Describe the role of project management software.*   [4]

One mark for each correct answer up to a maximum of four

- software used for project planning, scheduling,
- resource allocation and
- change management.
- It allows project managers, stakeholders and users to control costs and manage budgeting,
- quality management and documentation
- May be used as an administration system.

(b)   *Describe the facilities of project management software*   2 x [1 + 1]

- Scheduling – allows the user to create a list of tasks to be carried out with timescales against each task.
- Resource management – allows the user to allocate resources (people, equipment, third party contributions) to tasks
- Dependencies – will allow the user to identify which tasks are dependent on the completion of previous tasks in the timeline
- Critical path – depending on factors such as resources and dependencies will identify a critical path through the project
- Setting of milestones – allows progress to be evaluated a given points in the project to analyse ahead/ behind time.
- Different reporting methods – such as Gantt and PERT charts

[Question total 8]

8. *Describe the facilities provided by an email package and explain the advantages and disadvantages of using email for communication.* [6]

Indicative content

Facilities of an email package:
- Inbox / sent messages / trash
- Filing hierarchy
- Address book
- Ability to:
  - create groups / send one email to many recipients
  - Send attachments
- Date stamp communications

Advantages:
- sending an email costs the same regardless of distance and the number of people you send it to
- an email should reach its recipient in minutes, or at the most within a few hours
- your message will be stored until the recipient is ready to read it, and you can easily send the same message to a large number of people
- you can keep a record of messages and replies, including details of when a message was received

Disadvantages:
- unsolicited email can overwhelm your email system unless you install a firewall and anti-spam software. Other internet and email security issues may arise, especially if you're using the cloud or remote access.
- viruses are easily spread through email attachments
- at a click of a button, an email can go to the wrong person accidentally, potentially leaking confidential data and sensitive business information
- electronic storing space can become a problem, particularly where emails with large attachments are widely distributed.

Candidates give a clear, coherent response to the question. They are able to identify the majority of the facilities of an email package. They show a sound understanding of the advantages of using email and are fully aware of the disadvantages associated with the use of email. They make sound use of technical vocabulary.	5–6 marks
Candidates give a clear, coherent response to the question. They are able to identify the main facilities of an email package. They show an understanding of the advantages of using email and have some awareness of the disadvantages associated with the use of email. Their responses demonstrate the use of some technical vocabulary.	3–4 marks
Candidates identify some of the main facilities of an email package. They can describe one or two advantages of the use of email. The response lacks clarity and there are errors in spelling, punctuation and grammar.	1–2 marks
No appropriate response	

[Question total 6]

Part B

TASK 1 (a) Expansion	
Description	**Marks**
Create a database to store the given data. Using a sensible file name only (not db1)	1
Import the data (38 records)	1
Use 2 tables	1
One-to-many relationship on Location No	1
Integrity enforced (follow through)	1
Location table (5 records) Append/Make table query - 2 marks OR table created by deletion - 1 mark	2
Validation in Location table: • Input mask on Location No / Contact No • Range check on Location Cost / Distance 1 mark	2
Weekly Availability- Yes/No	1
Contact Number - text	1
TASK 1 (a) – Total marks	**11**

TASK 1 (b) Committee	
Description	**Marks**
Create Query - 2 tables (1 mark), Criteria "Friday" (1 mark), <20 (1 mark) Availability is TRUE (1 mark)	4
Friday Market Locations & Date **on one page only**	1
Location details - 1 mark data 1 mark layout	2
Stall details - 1 mark data 1 mark layout	2
Calculate Total Revenue SUM([Rental Cost]) 1 mark function 1 mark currency	2
Calculate profitability Total Revenue – Location Cost	1
Recommendation 1 mark function, 1 mark true message, 1 mark false message =IIf([Profitability]>0,"Viable","Not Viable")	3
Page orientation landscape	1
Correct page break	2
TASK 1 (b) – Total marks	**18**

TASK 2 – Finance	
Description	**Marks**
'=COUNTA('Stall Information'!B2:P2)	1
=B12/C10 1 mark formula, 1 mark absolute, 1 format mark percentage 1 mark integer	4
In D3 = today()	1
VLOOKUP(C6,'Member Details'!A1:E31,2) 1 mark =VLOOKUP(C6,'Member Details'!A1:E31,2,FALSE) 2 marks	2
VLOOKUP(C6,'Member Details'!A1:E31,3) 1 mark VLOOKUP(C6,'Member Details'!A1:E31,3,FALSE) 2 marks	2
Total =c10*D10	1
=COUNTIF('Stall Information'!B2:P4,Invoice!C6) (1 mark function, 1 mark content)	2
=HLOOKUP(C10,C19:I20,2) 2 marks =HLOOKUP(C10,C19:I20,2, FALSE) 1 mark	2
e11*d12	1
e11-e12	1
Merge and centre cells B15:C15	1
Adjust the row height and wrap text to fully display the message in B15:C15	1
Remove the green fill from all cells	1
Format appropriate cells to currency	1
Insert a border around the invoice B1:E16	1
TASK 2 – Total marks	**22**

TASK 3	
Evaluation	**Mark**
One to many relationship between Member and Booking	1
One to many relationship between Booking and Booking_Stall	1
One to many relationship between Stall and Booking_Stall	1
Member Table Primary Key	1
Booking Table Primary Key and Foreign Key (Member Primary Key)	2
Booking _Stall combined key 2 marks Or new primary key 1 mark two foreign keys 1 mark	2
Stall Table Primary Key	1
TASK 3 – Total marks	**9**