

AS GCE INFORMATION AND COMMUNICATION TECHNOLOGY

G062 Structured ICT Tasks

MARK SCHEME

Instructions for Examination Officer:

Please inform the Head of ICT, and any GCE assessors for this unit, that this document has arrived in your Centre.

MAY 2012



INSTRUCTIONS TO TEACHERS

- This mark scheme must be kept secure.
- Its contents may not be divulged to candidates until after the publication of results by OCR.

| | |
|----------------|------------------|
| Centre Name | Centre Number |
| Candidate Name | Candidate Number |

- This mark scheme must be kept secure by the examinations officer and not given to the teacher until the teacher is ready to mark the work. The examinations officer can release to teachers the mark schemes for individual tasks if required for marking before other tasks are completed.
- This mark scheme is intended as a working document for Centres as well as an aid to moderation. Please use one copy **per candidate** and attach securely to each candidate's work.
- If a candidate meets the requirements for a mark then tick the box next to that mark. You may use the numbers on the left hand side of the tick boxes to cross-reference evidence on the candidate's work.
- Indicate whole marks for each task in the box marked 'Centre' after each part. Some centres find it useful to identify the page numbers where evidence can be found next to the marking points in the mark scheme. Only whole marks can be awarded for each mark point; half marks cannot be used. Use blue or black ink only on this mark scheme, do not use red or green ink.
- Candidates must not make improvements to work once it has been marked.
- Marks must be received by OCR and the moderator **no later than 15 May 2012**.
- This document consists of **24** pages. Any blank pages are indicated.

| Task Marks | Max |
|------------|-----------|
| Task 1 | 11 |
| Task 2 | 9 |
| Task 3 | 23 |
| Task 4 | 28 |
| Task 5 | 9 |
| Final Mark | 80 |

Instructions for Teachers

This mark scheme is a confidential document. The contents must not be disclosed to candidates until after results have been issued in August 2012. You **must not** discuss the contents of the mark scheme with anyone outside of your centre.

- Once you have seen the mark scheme for a task you **must not** give any further assistance
- Show how and where the marks have been awarded
- Use blue, black or pencil to mark (try to avoid using red or green)
- Complete one mark scheme for each candidate
- Annotate the tasks and/or mark scheme to show where/why the marks have been awarded
- Only award a mark if **all** the bullet points have been met.

| Field Name | Data Type | Description |
|----------------|------------|--|
| JobID | AutoNumber | |
| CustomerID | Number | Foreign Key - Link to Customer ID in TblCustomer |
| SalesRepID | Number | Foreign Key - Link to Staff ID in TblStaff |
| Carpet ID | Number | Foreign Key - Link to Carpet ID in TblCarpet |
| Discount % | Number | |
| Area of Carpet | Number | |
| Perimeter | Number | |
| Fitting | Yes/No | ✓4 |
| Plywood | Yes/No | |
| Order Date | Date/Time | |
| Fitting Date | Date/Time | ✓4 |

| Field Name | Data Type |
|-------------|------------|
| Customer ID | AutoNumber |
| Forename | Text |
| Surname | Text |
| Address | Text |
| Town | Text |
| PostCode | Text |
| Telephone | Text |

| Field Name |
|-------------|
| Product ID |
| ProductType |
| Price |
| Unit |

- a (ii) 2 ✓ atomic data used for customer (zero marks if any below not atomic):
- separate forename and surname
 - separate address, town and postcode
- 3 ✓ all tables have sensible primary key
- 4 ✓ all of the following data types are used (zero marks if any item is missing or incorrect):
- perimeter = number
 - fitting = boolean (or equivalent)
 - fitting date = date/time
- 5 □ all of the following data types are used (zero marks if any item is missing or incorrect):
- telephone number = text
 - fitting time = date / time
 - price of anti-stain per square metre = number / currency

No evidence

| MARKS: | |
|--------------|---|
| Centre | 3 |
| Internal Mod | |
| Final mark | |
| Max | 4 |

- If using internal moderation, indicate the final mark.
- Transfer the marks to the front of the mark scheme.
- Check both the addition and the transcription.

| MARKS: | |
|--------------|---|
| Centre | 2 |
| Internal Mod | 3 |
| Final mark | |
| Max | 4 |



| MARKS: | |
|--------------|---|
| Centre | 2 |
| Internal Mod | 3 |
| Final mark | 3 |
| Max | 4 |



Transfer the total marks out of 80 into OCR Interchange by **15 May 2012**.

OCR will request a sample of work

- Send work to moderator with CCS/160 (Centre Authentication Form) within three working days
- Each script must have an individual mark scheme
- Make sure the work is packaged in accordance with regulations:
 - No binders, no plastic wallets
 - One mark scheme for each candidate
 - A cover sheet for each separate task
 - Clearly identify different parts of the tasks
 - Name of candidate, candidate number, name of centre and centre number on each task
 - Work securely fastened together

If you believe that a candidate has created a correct and valid solution to a task that results in a different answer to that which is published within this mark scheme, then you are advised to contact OCR (general.qualifications@ocr.org.uk) to seek further guidance.

Task 1 – [Total 11 marks]

1 a Annotated evidence of the creation of the F-Bot character

Features

- the character looks like a robot
- the character has been created from scratch
- F is included in the finished character
- the F-bot character will be scalable while maintaining detail and definition including the letter F
- the character contains the following colours: Red, White and Blue
- the character has been created as a vector image

1-3 □

| Tick | Marks | Requirement for marks |
|------|-------|-----------------------|
| | 3 | All 6 features |
| | 2 | Any 5 features |
| | 1 | Any 4 features |

[3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

b The printed help sheet(s) includes:

Presentation

- must be a stand-alone document
- title is in the house style 18pt Century Gothic underlined, black, centred
- subtitles are used and are present in the house style 14pt Century Gothic, bold, black
- normal text is the house style Arial 12pt black
- appropriate screenshots, that are visible and suitably cropped
- text not written as “I did ...”
- no spelling errors

Features

Clear instructions and screenshots which show how to complete the following tasks:

- scale the image to an appropriate size while maintaining proportions
- apply a transparent background
- export the image in a format that supports transparent backgrounds

4-6 □

| Tick | Marks | Requirement for marks |
|------|-------|--|
| | 3 | All 3 features and all 7 presentation elements have been met |
| | 2 | Any 2 features and any 6 presentation elements have been met |
| | 1 | Any 1 feature and any 5 presentation elements have been met |

[3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

c The hand-drawn storyboard should include:

- 7 ■ the storyboard should show a minimum of 5 storyboard panels that must be hand-drawn and annotated to identify the actions taking place
- the animation begins showing the standard F-bot graphic
 - looking left
 - looking right
 - having a bright idea
 - then looking excited or happy
- 8 ■ each panel clearly shows where the previous scene ended and the next starts via an indication of which frame has been reached or the amount of frames in each panel
- the total length of the planned animation should be shown as at least 50 frames or 5 seconds [2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

d Annotated evidence of the animation implementation:

Animation Requirements

- the animation should be at least 5 seconds long
- the animation should run at 10 frames per second
- the animation should loop effectively
- the animation should be 200 pixels wide and 250 pixels high
- the only other colours included are black and/or yellow

Creative Requirements

- the animation begins showing the standard F-bot graphic
- looking left
- looking right
- having 'a bright idea'
- looking excited or happy
- returning to the standard F-Bot graphic

9-11

| Tick | Marks | Requirement for marks |
|------|-------|--|
| | 3 | All 5 animation requirements and all 6 creative requirements have been met |
| | 2 | Any 4 animation requirements and all 6 creative requirements have been met |
| | 1 | Any 3 animation requirements and any 5 creative requirements have been met |

[3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

| | |
|---------------------------|-----------|
| Task 1 TOTAL MARKS | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 11 |

Task 2 – [Total 9 marks]

- 2 a(i)** Printed annotated evidence shows
- 1 ■ how *Marketing.txt* was used as the data source
- how the mail merge fields were added
- all merge fields are shown:
- Forename
 - Surname (ensure a space is shown between Forename and Surname, else zero marks)
 - Address
 - Town
 - Postcode
- [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- a(ii)** Printed annotated screenshot evidence shows:
- 2 ■ how to select households who have expressed an interest in visiting the Futuretastic park **and** are planning a weekend break in the near future
- [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- a(iii)** Printed annotated screenshot evidence of:
- 3 ■ how a rule was applied that would lead to a result of families with children receiving **We believe you have a child in your family!...** and families with no children receiving **The luxurious Winchester Hotel has extensive spa facilities...**
- [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- a(iv)** Two printed personalised letters (*zero marks if a(ii) has been answered incorrectly*)
- 4 ■ the letter for **Clare Wright** should contain the text: 'We believe you have a child in your family! ...'
- the letter for **Maria Dhaliam** should contain the text: 'The luxurious Winchester Hotel has extensive spa facilities ...'
- [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- b** Printed annotated evidence to show how F-Bot was included as a background to the letter
- 5 ■ a method of placing the F-Bot graphic behind the text and the text remains readable
- [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

c(i) Printed annotated evidence of:

- 6 ■ how a rule was applied that automatically calculates the discount levels supplied by Futuretastic:
- 1 child – 5% off
 - 2 children – 10% off
 - 3 children 15% off
 - 4 or more children – 20% off

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

c(ii) Printed annotated evidence to show:

- 7 ■ how a rule was applied to ensure that a family that has one child has the text 'child' and a family with two or more children has the text 'children'

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

c(iii) Printed letters to customers

- 8 Personalised letters have been printed for
- Clare Wright has 1 **child** and **5%** discount and no letter has been printed for John Jones
- 9 ■ style sheet criteria have been correctly applied (12pt Arial, Black for the letter text)
- voucher displayed at the bottom of letter
 - percentage discount has been displayed at 72pt to the side of the family discount message

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

| | |
|---------------------------|----------|
| Task 2 TOTAL MARKS | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 9 |

Task 3 – [Total 23 marks]

3 a(i) The worksheet is printed on one side of A4 paper (*else zero marks*).

Note: *Zero marks if row and column headings are missing.*

- 1 ■ the 3pm-4pm column shows:
- Estimated Park Entries **100**
 - Estimated Park Exits **1800**
 - Net Visitor Flow **-1700**
 - Total in Park **1640**

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

a(ii) Printed annotated evidence shows calculations are syntactically correct (*zero marks if no annotation*).

Note: *Zero marks if row and column headings are missing or if formulae/ functions are truncated.*

- 2 ■ Net Visitor Flow is calculated correctly as the Estimated Park Entries – Estimated Park Exits
- Total Visitors in Park 9am – 10am is equal to 9am Net Visitor Flow
- Total Visitors in Park from 10am onwards is calculated correctly, e.g. 10am – 11am calculations (Previous Hour) Total Visitors in Park + (Current Hour) Net Visitor Flow

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

b(i) The worksheet is printed on one side of A4 paper (*else zero marks*).

Note: *Zero marks if row and column headings are missing.*

- 3 ■ The Model worksheet layout matches Table 3.3
- Attractions appear in the left hand column
 - Times appear in the top row
 - Values for excess capacity or queue appear and there are no other intermediate calculations or data present

4 ■ The following queue sizes have been calculated for Zschool is Kool

- 11am – 12pm **-101**, 12pm – 1pm **16**, 1pm – 2pm **75**
OR
- 11am – 12pm **101**, 12pm – 1pm **-16**, 1pm – 2pm **-75**
OR
- 11am – 12pm **-102**, 12pm – 1pm **16**, 1pm – 2pm **75**
OR
- 11am – 12pm **102**, 12pm – 1pm **-16**, 1pm – 2pm **-75**

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

b(ii) Annotated printed evidence shows:

- 5 The two largest queues between 3pm – 4pm are:
- Over the Horizon Ride
 - Headspace 3D Spectacular

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

b(iii) Annotated printed evidence shows:

- 6 ■ The largest queue of the day is identified as the Headspace 3D spectacular queue between 2pm-3pm [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

b(iv) Printed annotated evidence shows calculations are syntactically correct (*zero marks if no annotation*).

Note: *Zero marks if row and column headings are missing or if formulae/ functions are truncated.*

- 7 ■ the formulae used for an attraction's queue size between 9am -10am is correct and contains the following elements (or equivalent):
- the estimated number of visitors to use an attraction is calculated as (Total visitors in park x Percentage use).
 - the maximum places available per hour is calculated as (Cycles per hour x Max visitors per cycle)
 - excess capacity or queue is calculated as the difference between the two
 - all calculations involving visitors have been rounded up

In addition to the formulae used in marking point 7 (allow follow through)

- 8 ■ all formulae from 10am-11am onwards take account of the previous hour's queue
- if an excess capacity is found in the previous hour then it should **not** be added to the result.
 - if a queue is found in the previous hour then it should be added to the result for the current hour [2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

c(i) Annotated evidence shows:

Note: *Grey scale printouts are acceptable*

- 9 the model worksheet is formatted so that:
- areas with excess capacity appear green with no text visible
 - areas with between 1-49 visitors in the queue appear orange and the text is visible
 - all queues with 50 or more visitors appear red and text is visible and bold
 - a key has been added to the worksheet [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

c(ii) Annotated evidence shows:

- 10 ■ screenshot evidence is clearly annotated to show how the 3 different rules for formatting were set up
- evidence of rule for excess capacity
 - evidence of rule for a queue size between 1 and 49
 - evidence of rule for a queue greater than or equal to 50 [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

d(i) Printed evidence shows:

- 11 ■ the Queued Visitors per Attraction shows Headspace 3D spectacular **450** or **-450**
- the Queued Visitors per Hour for 12pm-1pm is **595** or **596** or **-595** or **-596**

Note: Both values must be positive or both values must be negative

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

d(ii) Annotated evidence shows: *(zero marks if no annotation)*

Note: Zero marks if row and column headings are missing or if formulae/ functions are truncated.

- 12 ■ Queued Visitor hours are calculated correctly – a function or formula is used that ensures only values where there is a queue are totalled in the row or column

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

e(i) Annotated evidence **explains how:**

- 13 ■ screenshot evidence that a multiple choice selector control (e.g. Combo box) has been implemented and that an attraction can be selected from the list of attractions available
- the graph process is fully automated when the selector is used and it will work for any selected attraction

- 14 ■ the data range that the graph is based upon has been clearly identified
- the method used to generate the data that the graph is based upon has been clearly identified and explained.
E.g. Lookup / Index function to locate the queue figures for a chosen attraction

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

e(ii) Printed evidence of the graph for Zappo the Wonder Phone Rollercoaster shows:

- 15 ■ the title contains **Zappo the Wonder Phone Rollercoaster**
- the graph should fill 1 side of A4 in landscape orientation
- the X axis should be labelled **Time** and the axes should be labelled and each hour is clearly indicated
- the Y axis should be labelled **Queue** and suitable values indicated
- the queue figures (queue and excess or just queue) for each time should match those in the candidate's model

- 16 ■ the house style has been applied
- title is 24pt Century Gothic, underlined, centred
- all other text for axes and values is Arial 12pt (allow an alternative Sub-Title style of Century Gothic 14pt Bold for axes)

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

e(iii) Printed annotated evidence shows:

- 17 ■ annotated screenshot evidence of a print button
 ■ annotated explanation of the method used to automatically print the graph when the button was clicked e.g. Macros or code [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

f(i)

- 18 Printed evidence of the Welcome page contains:
 ■ a title of **Futuretastic Visitor Queue Model**
 ■ F-Bot is seen in the top left corner
 ■ no gridlines are visible
 ■ 3 Buttons linking to the Data worksheet, Model worksheet and Graph worksheet are present and each of the 3 buttons has explanatory text
- 19 Annotated evidence of the navigation system:
 ■ the Data, Model and Graph worksheets have a button linking them back to the Welcome Page
 ■ an explanation of the method used to implement the navigation e.g. a recorded macro assigned to a button [2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

f(ii) Annotated evidence shows:

- 20 ■ protection has been applied to all data cells (rather than just one)
 ■ how the system reacts when a user attempts to change a cell [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

g Each test must be for a different formula or function.
 Note: *only mark first 3 tests (zero marks if no table is used)*
 Note: *all tests must be valid (i.e: no testing of error messages)*

- 21 ■ first test has a clear input **value(s)** with a clear **location(s)** identified for input **and** the output **value** is clearly identified **and** is logically correct based upon the input value(s)
- 22 ■ second test has a clear input **value(s)** with a clear **location(s)** identified for input **and** the output **value** is clearly identified **and** is logically correct based upon the input value(s)
- 23 ■ third test has a clear input **value(s)** with a clear **location(s)** identified for input **and** the output **value** is clearly identified **and** is logically correct based upon the input value(s) [3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

| | |
|---------------------------|-----------|
| Task 3 TOTAL MARKS | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 23 |

Task 4 – [Total 28 Marks]

- 4 a(i)** Printed evidence of the relationships shows:
 Note: (*Variation is permitted in the table names chosen*)
- 1 ■ a 1:M relationship between EMPLOYEE and COURSE_ATTENDANCE
 ■ a 1:M relationship between COURSE and COURSE_ATTENDANCE

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- a(ii)** Printed evidence shows:
- 2 ■ in the EMPLOYEE table the following field data types are set
- Telephone – text type
 - Employment Date – date type
 - Basic Salary – currency
- in the COURSE_ATTENDANCE table the following data types are set
- Pass – boolean (yes/no) type
- 3 ■ in the EMPLOYEE table there is an appropriate primary key e.g. EmployeeId
 ■ in the COURSE table there is an appropriate primary key e.g. Course Title
 ■ in COURSE_ATTENDANCE table there are the following keys:
- an appropriate primary key is used. This may be a COMPOUND KEY
 - Foreign Key (e.g. EmployeeId) from EMPLOYEE
 - Foreign Key (e.g. Course Title) from COURSE

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

- a(iii)** Annotated evidence shows:
- 4 ■ a connection being established between the employee data file and the database system
 ■ the EMPLOYEE table is chosen as the import table
 ■ the data is successfully imported

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- b(i)** Annotated evidence shows:
 Note: *Values for Postcode and Telephone must be present but labels for Postcode and Telephone are optional*

- 5 ■ the following data is present
- Employee Number – 6
 - Forename – Simon
 - Surname – Jones
 - Address – 66 Longest Ave
 - Town – Coventry
 - Postcode – CV89 6GB
 - Telephone – 02345678912
 - DOB – 25/12/1969
 - Employment Date – 16/12/2009
 - Basic Salary – £38000
- F-Bot has been inserted in the top right corner of the form.

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- b(ii)** Annotated evidence of course dropdown list shows:
- 6 ■ all courses are displayed and no courses are truncated
 - courses are in ascending alphabetical order (1st Aid+ to Ride specific procedures)

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- b(iii)** Annotated evidence of calculations:
 Note: *Allow follow through if the calculation is syntactically correct but a previous calculation was wrong*

Calculations required

- a calculation has been implemented that causes a failed course to display 'bonus points' as zero
- a calculation has been implemented that displays 'total bonus points' correctly
- a calculation has been implemented that displays the correct 'bonus %' (total bonus points x 0.5)
- a calculation has been implemented that displays the bonus amount (basic salary x the bonus %)
- a calculation has been implemented showing the correct figure for 'salary + bonus' (basic salary + bonus amount)

7-10

| Tick | Marks | Requirement for marks |
|-------------|--------------|--|
| | 4 | All 5 calculations implemented and annotated |
| | 3 | Any 4 calculations implemented and annotated |
| | 2 | Any 3 calculations implemented and annotated |
| | 1 | Any 2 calculations implemented and annotated |

[4]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 4 |

- b(iv)** Annotated evidence shows:
- 11 ■ how a print button was added to the form

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

c Annotated evidence shows:

- 12 ■ a validation rule has been implemented that ensures all dates entered into the Employment Date field must be $\geq 01/06/2009$ (or equivalent, e.g. $>31/5/2009$)
 - invalid data has been entered (is visible) and a customised and appropriate validation message is displayed

- 13 ■ *Date of Birth only allows new employees between the age of 17 and 65 to be employed.*
 - a validation rule has been implemented that ensures that employees cannot be employed if they are below 17 or above 65 on the date of first employment.
 - invalid data has been entered (is visible) and a customised and appropriate validation message is displayed when age is less than 17
 - invalid data has been entered (is visible) and a customised and appropriate validation message is displayed when age is greater than 65

- 14 ■ *The Date Attended for a new course must always be later than the Employment Date of an employee.*
 - a validation rule has been implemented that checks the Date Attended is \geq Employment Date.
 - invalid data has been entered (is visible) and a customised and appropriate validation message is displayed

[3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

d

- 15 Printed evidence shows:
 - Simon's Loyalty Bonus Date is 30/04/2011 on both print-outs
 - a method (e.g. Tick box) is present to record if the Bonus payment has been paid
 - on Simon's Pre-Bonus print a message is present reading 'The Bonus is now due to be paid' and on Simon's 'Post-Bonus' print there is no message

- 16 Annotated evidence shows:
 - a calculation is present to calculate the loyalty bonus date that adds 500 days onto the employment date
 - an annotated rule or calculation is provided to show how all three conditions were met
 - the message 'the bonus is not due to be paid' appears if the loyalty bonus is not due
 - the message 'the bonus is now due to be paid' appears if the loyalty bonus is due
 - no message appears if the bonus has been paid
 - the method implemented would work for any given employee

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

e(i) Annotated evidence shows how:

- 17 ■ only courses that have been passed were included
- only courses between 01/01/2010 and 30/12/2010 were selected
- the total passes for each course were added together [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

e(ii) Printed evidence shows:

- 18 ■ the chart shows
 - Queue Management = 3
 - 1st Aid + = 1
- the X axis shows Course Name and is appropriately labelled
- the Y axis shows the Number of Passes and is appropriately labelled
- a title is present in the house style 24pt Century Gothic, underlined, black, centred [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

f(i) Annotated evidence shows how:

- 19 ■ only courses not passed were selected
- the total number of courses not passed was totalled for each employee
- only employees who have failed three or more courses are selected [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

f(ii) Printed report shows: (zero marks if not on one side of A4)

- 20 ■ the following employees
 - Diana Mander with 4 failed courses
 - Alison Smith with 3 failed courses
- results grouped by Employee
- courses failed and the dates they were failed on shown in descending order of date
- the title 'Employees who have failed 3 or more courses' in 24pt Century Gothic, underline, black, centred [1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

g

- 21 Printed evidence of the main menu content includes:
 - a title and the F-bot character
 - buttons to allow navigation to the form, graph and report

- 22 Annotated evidence of how the employee form has been customised so that:
 - buttons (previous, next, first, last, new record and return to main menu) have been added (*evidence of how one button was implemented is sufficient – but all buttons should be visible on the form*)
 - scroll bars and record selectors have been switched off

- 23 Annotated evidence to show how:
 - the main menu is opened and maximised when the system opens (e.g. Macros or code provided) [3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

h A printed user guide contains evidence of:

Presentation requirements

- the user guide is a standalone document
- title page / front cover
- contents page with page numbers
- correct page numbers on user guide pages
- consistent house style throughout
 - titles are Century Gothic, 18pt, black, underline, centred
 - normal text is in 12pt Arial
 - subtitles are in Century Gothic, 14pt bold
- appropriate screenshots that are visible and suitably cropped
- two from:
 - troubleshooting guide
 - glossary of terms
 - index
- no spelling errors

24-26 □

| Tick | Marks | Requirement for marks |
|------|-------|---|
| | 3 | All 8 presentation requirements are present |
| | 2 | Any 7 presentation requirements are met |
| | 1 | Any 6 presentation requirements are met |

[3]

| | |
|---------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

Content requirements

- instructions showing how to open and close the system
- instructions on how to navigate between system components
- instructions on how to print (e.g. printing graph or report)
- instructions on how to use the employee bonus system
- instructions on how to use the employee record card (e.g. edit, add)

27-28 □

| Tick | Marks | Requirement for marks |
|------|-------|------------------------------------|
| | 2 | All 5 content requirements are met |
| | 1 | Any 4 content requirements are met |

[2]

| | |
|---------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

| | |
|---------------------------|-----------|
| Task 4 TOTAL MARKS | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 28 |

Task 5 – [Total 9 marks]

5 a *Zero marks if the diagram is not hand drawn (accept scanned hand-drawn designs)*

- 1 ■ all 5 pages (Welcome Zone, Fun Zone, Transport Zone, Education Zone, Kids Zone) are included and all 5 pages have two way links between them
- an incoming weather feed one way link into the Welcome Page
- a two way link between the Welcome Page and a live mapping service

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

b Annotated evidence shows:

- 2 External style definitions file contains the following layout definitions
 - a maximum page width of 1000px has been defined
 - a left hand column area has been defined as 200px wide with a black background.
 - a right hand column area has been defined as 800px wide with a white background

3 External style definitions file contains the following appearance definitions

- Title style is defined as Century Gothic 32pt, black, underlined, centred
- Sub-title style is defined as Century Gothic 16pt, black, bold
- Normal Text styles is defined as Arial 12pt, black
- Hyperlinks are defined as Arial 12pt, white

[2]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 2 |

c Content Requirements

- CSS has been applied to all pages evidenced by pages having a consistent layout
- CSS has been applied to all pages evidenced by pages having consistent text styles
- F-Bot appears in the top left of every page
- the navigation bar contains links to all 5 pages
- Welcome Page
 - welcome text
 - weather information is present for the Birmingham area
 - the Future Food Zone is mentioned and there is a Future Food Image
 - the Gift Shop and First Aid Offices are mentioned
 - park Opening and Closing times
 - ticket Prices £14.50 Adult, £8.50 Child, £11.50 Concession
 - an embedded map centred on the region CV10 7XX
 - text for directions to the park is included
- each of the four Zones (Fun, Transport, Education and Kids) should show
 - suitable images for the attractions (two per page)
 - accurate attraction text descriptions (two per page)

4-6 □

| Tick | Marks | Requirement for marks |
|------|-------|------------------------------------|
| | 3 | All 6 content requirements are met |
| | 2 | Any 5 content requirements are met |
| | 1 | Any 4 content requirements are met |

[3]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 3 |

- d(i)** Annotated evidence shows:
- 7 □
- the source of the weather feed
 - evidence of how the weather feed was embedded on the Welcome Page
 - the weather forecast is for the Birmingham (UK) area

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- d(ii)** Annotated evidence shows:
- 8 □
- the source of the map feed
 - evidence of how the live map data was embedded on the Welcome Page
 - the default position of the map should be an area based on CV10

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

- e** Annotated evidence shows:
- 9 □
- the Welcome Page has been printed again and:
 - left hand column – white background/black text
 - right hand column – black background/white text
 - the external CSS file has been annotated to show where changes were made to ensure that all site pages would update

[1]

| | |
|---------------------|----------|
| MARKS: | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 1 |

| | |
|---------------------------|----------|
| Task 5 TOTAL MARKS | |
| Centre | |
| Internal Mod | |
| Final Mark | |
| Max | 9 |

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