Business and Communication Systems

Unit 1: Software Applications for Business

GSY11

[GSY11]
MONDAY 23 MAY – FRIDAY 27 MAY

Centre Number

Candidate Number

TIME

2 hours.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.
Save each document using the name specified in each task.
Add your Centre Number, Candidate Number, Task Number and Label to the header or footer of every printout produced.
All printouts must be attached to the examination paper at the end of the examination in the correct order.
Use the treasury tag provided to attach your printouts to the examination paper. At this point you should complete the checklist at the back of the examination paper.
You may **not** take the examination paper with you.
Answer **all four** tasks in order.

Number of printouts attached (to be completed at the end of the examination)

INFORMATION FOR CANDIDATES

The total mark for this paper is 100.
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each task or part task.
Quality of written communication will be assessed in Tasks **1(d)** and **3(i)**.
Filenames to be used in the completion of this examination:
*   Logo.jpg
*   Task 1 Flyer.docx
*   Social Media Data.xlsx
*   Rocket Adventure.accdb
*   Letterhead.docx

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
Total Marks	

Introduction

Rocket Adventure is a new theme park opening in Ballymena, Summer 2022. It will be the only one in Northern Ireland and is owned by a local business man, Mr Sam Maxwell. Rocket Adventure will include a large number of rides and an indoor water park.

Rocket Adventure's contact details are as follows:

Address	123 Blacks Road, Ballymena, BT42 1AN
Telephone	028 25251251
Email	rocketadventure@ni.net
Website	www.rocketadventure.net
Instagram Account	@rocket.adventure
Facebook Account	Rocket Adventure

Sam is keen to make use of software applications to help him launch this new business.

Four tasks follow, which will require you to produce some of the documentation/files that Sam requires.

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To assist your file management, create a folder in your work area called "BCS Exam Files" and any files you are asked to save should be put in this folder.

Using Word Processing Software/Desk Top Publishing Software

Task 1

Files named "Logo" and "Task 1 Flyer" are available to assist you with this task.

Sam is planning to open Rocket Adventure on Saturday 16 July 2022 from 11.00 am – 10.00 pm.

He would like a flyer to be produced in order to advertise the opening day of the theme park.

The flyer **must** include the following essential information:

- Name of the theme park
- Logo
- Date and time of opening
- Location

Complete the following tasks to create this flyer.

(a) Open the file named **"Task 1 Flyer"**, change the orientation of the page to portrait. [1]

(b) Produce an effective A4 flyer which includes the essential information. [4]

(c) Include two other pieces of appropriate information on your flyer. [2]

(d) Use effective fonts, styles and design features in your flyer. [4]

Save this document as **Task 1 Flyer Complete**. Print one copy of the flyer on one A4 page. Label the printout **Task 1 Flyer Complete**.

[11]

Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

Using Spreadsheet Software

Task 2

Part A

A file named "Social Media Data" is available to assist you with this task.

Sam would like to see if the money and effort he is spending on social media is paying off. Your task is to develop this spreadsheet.

Using a Spreadsheet Software package open the spreadsheet **Social Media Data**.

In the worksheet DATA complete the following:

(a) In cell A1 enter the text "Rocket Adventure Social Media Tracking".
    Embolden this text and increase the font size to 18.
    Merge and centre cells A1 to J1.
    Insert grey shading in merged cells.   [4]

(b) Enter the following text in the cells shown:

Cell	Text to be entered
A2	Social Media Network
B2	Dec
C2	Jan
D2	Feb
E2	Mar
F2	Apr
G2	May
H2	Total
I2	Average
J2	Competition

[2]

(c) Enter the following numbers in the cells shown:

Cell	Number to be entered
B10	4589
C10	7258
D10	7921
E10	9562
F10	10256
G10	10965
B11	2
C11	51
D11	89
E11	123
F11	265
G11	321

[2]

(d) Format the cells B3 to J13 to number, with no decimal places. [2]

(e) Enter a formula in Cell H3 which will calculate the total Blog Visitors. [2]

(f) Enter a formula in Cell I3 which will calculate the average Blog Visitors. [2]

(g) Sam wants to know which methods of social media are working best for him and wants to keep those who have a total of 10 000 or more. In cell J3 enter a formula to display Yes or No. If total followers are less than 10 000, display No; if total followers are 10 000 or more, display Yes. [4]

(h) Replicate the formulae created in parts **(e)**, **(f)** and **(g)**, for all the other social media networks. [2]

(i) Using the count function enter a formula in cell B15 which will count the number of social media networks Sam is using in March. [2]

(j) Enter a formula in cell H15 which will display the total number of the largest social media network. [2]

(k) Enter a formula in cell H16 which will display the total number of the smallest social media network. [2]

(l) Insert your Candidate Number, Centre Number and the text "Rocket Adventure Task 2A" in the centre of the footer. [2]

(m) Save the file as **Social Media Data Complete**.
Print **one** copy of the worksheet data **on one A4 page**, **landscape**, **with row and column headings and gridlines visible**.
All the data must be visible.
Label the printout **Social Media Data Complete**. [2]

(n) Print **one** copy of the worksheet formulae **on one A4 page, landscape, with row and column headings and gridlines visible**.
All formulae must be visible.
Label the printout **Social Media Formulae**. [2]

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Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

Part B

Using the file **Social Media Data** created in Task 2 Part A complete the following:

Create a Bar Chart detailing the total for each social media network.

Include:
•   Rocket Adventure logo
•   A title for the chart – Social Media Networks
•   Appropriate titles on each axis
•   A data value for each bar on the chart

Save the chart as a new sheet, called **Social Media Graph**.
Print the Bar Chart full size, on one A4 sheet.
Label the printout **Social Media Graph**.   **[7]**

Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

Using Database Software/Word Processing Software

Task 3

A file named "Rocket Adventure" is available to assist you with this task.
Sam would like to use a database to store details of the theme park employees.

Using the table EMPLOYEE in the file **Rocket Adventure**, complete the following tasks:

(a) The field name for "Streeet" has been spelt incorrectly and needs to be changed to
"Street". Make this change to the database design. [1]

(b) A new employee is to be added to the EMPLOYEE table.
Add this new employee; details are as follows:

EmpID	138
DeptID	OP145
Forename	Jane
Surname	Brown
Street	22 Maze Road
Town	Ballymena
Postcode	BT42 2SA
Job	Host
Experience	No
GCSE Maths	Yes

[2]

(c) An error was made when entering the details of EmpID 139.
Her address should be 21 Manor Road.
Make this change. [1]

(d) EmpID 160 has decided not to take up the offer of employment. Delete this employee.
[1]

Using the EMPLOYEE table in the file **Rocket Adventure**, complete the following tasks:

(e) Sam wants the details of all employees who have been employed as an Operator or a Host. Create a query to display only the EmpID, Forename, Surname, Street, Town and Postcode of these employees.
- Sort the search result in Surname ascending.
- Save the query as **Job Roles**.
- **Print** the results of the query on one A4 page.
- Label the printout **Job Roles**. [4]

Using the tables EMPLOYEE and DEPARTMENT in the file **Rocket Adventure**, complete the following tasks:

(f) There is a "one to many" relationship between the EMPLOYEE and DEPARTMENT tables. Create this relationship and relationship report.
- Enter your centre number and candidate number as a footer in the relationship report.
- Save the relationship report.
- Print the relationship report on one A4 page.
- Label the printout **Relationships for Rocket Adventure**. [3]

(g) Sam wants a report giving details of both employees and their line managers. The title of the report is "Employee Details".
- Include in your report: EmpID, DeptID, Forename, Surname, Job, Experience and Line Manager.
- The report is to be sorted by EmpID ascending.
- The report must be professional in appearance and in landscape mode.
- The Rocket Adventure logo is to be included and positioned appropriately.
- Create this report and save it as **Employee Details**.
- **Print** the report Employee Details on one A4 page.
- Label the printout **Employee Details**. [7]

Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

Sam would like to invite some of his employees and their families to the theme park before it opens. The event will be on Saturday 2 July 2022 at 10.30 am.

Using word processing software, the file named **"Letterhead"** and the query **"Job Roles"** created in **Part (e)**, complete the following tasks:

(h) Using the file **Letterhead**, create a letter addressed to all Operators or Hosts.
The letter must contain three paragraphs:
- Reason why they have been invited to the park
- Details of the private event
- Any other relevant details

Using a mail merge facility insert only the following fields (from the JOB ROLES query in the **Rocket Adventure** file) in the letter:
- Forename
- Surname
- Street
- Town
- Postcode [12]

(i) Print out the standard letter showing the merged fields.
- Label the printout **Standard Letter**. [5]

(j) Print out the personalised letters.
- Label the letters **Letter 1**, **Letter 2**, etc. for each personalised letter. [3]

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Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

Using Multimedia Presentation Software

Task 4

Sam has limited knowledge of databases. His Finance Manager has told him that he must use validation. Create a presentation to help him understand the different types of validation.

Using an appropriate software package, create a presentation for Sam, called **Validation**, which explains the meaning of these terms.

The presentation should have **three** slides.

    (a) Slide 1 should contain:
- A title "Presence Check".
- Details of what a presence check is.
- An example of a presence check. [3]

    (b) Slide 2 should contain:
- A title "Range Check".
- Details of what a range check is.
- An example of a range check. [3]

    (c) Slide 3 should contain:
- A title "Type Check".
- Details of what a type check is.
- An example of a type check. [3]

    (d) Save your presentation.
Print slide 1 full size.
Print slides 2 and 3 in handout mode (2 slides per page).
Label the printouts **Validation 1** and **Validation 2**. [2]

[11]

Ensure that your Candidate Number, Centre Number and the Task Number are on all printouts.

PRINTOUT CHECKLIST

Task	Printout label	Completed
1	**Task 1 Flyer Complete**	
2	**Social Media Data Complete**	
	Social Media Formulae	
	Social Media Graph	
3	**Job Roles**	
	Relationships for Rocket Adventure	
	Employee Details	
	Standard Letter	
	Letter 1, Letter 2, etc.	
4	**Validation 1**	
	Validation 2	

THIS IS THE END OF THE QUESTION PAPER