ADVANCED MANAGEMENT SERVICES

SCHOOL BASED ASSESSMENT

(General)

PRACTICAL

Spreadsheet

Database Management

Wordprocessing

Problem-Solving and Program Implementation

MAY/JUNE 2021

SCHOOL BASED ASSESSMENT

Carnival has long been a traditional cultural festival in several Caribbean territories. Every year, thousands of costumed masqueraders parade through the streets, dancing to the pulsating sounds of steelband, calypso and soca. Most of these revelers register to participate in the band of their choice months before the festivities begin. Organizers of these bands must utilize management and are organizational skills in order to stage a successful event. As a Bandleader of one of these carnival bands, you are required to utilize suitable Wordprocessing, spreadsheet, database management as well as a programming application to design and implement computer-based solutions to the tasks involved in the management of your carnival band.

Spreadsheet

The financial records of the band are maintained using a spreadsheet application. The names of masqueraders are listed by section. Both men as well as women may register to play in each section. There are five sections in the band. The cost of costumes is quoted in US dollars. The cost by section is $160, $220, $280, $350 and $425 respectively. Masqueraders are given the option of paying for the costume in three installments, or paying the full cost in one payment. Many people utilize the installment option. Single full payment attracts a discount of 10%, while payment by installments attracts an interest of 15%. Installments should be spread over three equal payments.

Each masquerader pays an 'Inclusive' fee. A $150 Inclusive fee entitles the masqueraders to food, drinks, access to portable bathroom facilities and bottled water during the carnival parade through the streets. However, payment of $50.00 entitles the masqueraders to portable bathroom facilities and bottled water only.

Expenditure is incurred in the provision of several amenities for masqueraders during the carnival. The bandleader mush supply food, drinks, portable bathroom facilities, transportation, music, security personnel, and artiste fees. In addition, the costs of material for the manufacture of costumes as well as labour costs are incurred.

Because of the anticipated large number of masqueraders, the bandleader has decided to manage the income and expenditure of each section separately.

You are required to;

1.   Design a worksheet(s) which accepts income and expenditure costs for each section.

Your worksheet must record all payments made by masqueraders, (a few persons have only made one or two of the required three installment payments on costumes), the total amount paid by each person as well as the grand total collected must be calculated. Costume payments must be made in US dollars. The total payments made by each person however, must be converted to the equivalent amount in local currency.

In an appropriate row, count the number of masqueraders in the section; calculate the total payment on costume, Inclusive fees and the total overall payment.

The expenditure incurred for each section must also be calculated. Food is $60.00 per person; drink is $40.00 per person; material is $150.00 and labour is $75.00.   Other services are provided at a flat rate for the entire band. These are as follows: bathroom - $3000.00; transport - $2500.00; music - $4000.00; security - $1800.00; artiste - $5000.00. The cost of each flat rate services for each section = Rate/No. of Sections.

Food and drinks are increased by 15% of the starting per person cost for each successive section, material is increased by 12% of the starting cost for each successive section, while labour is increased by 8% of the starting cost for each successive section.

The total cost of each service for each section = Cost of service X the number of masqueraders in the section.

Save your spreadsheet as **Masqueraders1**.

2.   Modify your spreadsheet to effect the following changes:

(a)   Insert a masquerader before the last person in each of the first three sections.

(b)   Delete the third masquerader from each of the last two sections.

(c)   Create a table that shows the total income and total expenditure by sections.

Save your spreadsheet as **Masqueraders2**

3.   Perform the following modifications to your worksheet.

     (a)   The cost of raw materials has decreased. Change the initial cost of materials from $150.00 to $135.00.

     (b)   Labour costs however, have increased. The starting cost of sewing costumes for the first section is now $95.00.

     (c)   Due to inflation, it has become necessary to increase the cost of food and drink from 15% to 20%. However, the first section has been spared this price hike.

     (d)   Sort the first two sections in descending order by Total Payment.

     (e)   Sort the third and fourth sections in ascending order by Name, then by cost.

     (f)   Create an appropriate chart which compares the income and expenditure of each section. Give this chart a suitable name.

     (g)   Create an appropriate chart, with appropriate data labels, which shows the distribution of expenditure for any one named section.

Save your spreadsheet as **Masqueraders3**.

Database Management

You should use a suitable application to manage data on persons who have registered to play in your band. Personal data on each applicant, such as name, sex, address, size and telephone contact must be stored. Masqueraders' payment data must also be stored. The cost of costumes varies by section. Costume prices range from US$160 to US$425. In addition, the section of the band in which they choose to play must be recorded. The band has five named sections. Each section has a specific four-digit section code. Your database should contain three tables. Using data from your spreadsheet, populate your database with data on at least twelve but not more than fifteen persons in each section.

You should test your database by performing queries to show:

1.   The name, age, size and address of all persons registered to play in a named section. Name this query **Section**.

2.   The ID Number, name, sex, and age of all female masqueraders between twenty and thirty years old. Name the query **TwentiesLadies**.

3.   The lD Number, LastName, section and total payment of all persons who have paid in full for their costume in a given section. The data supplied should be sorted by Last name. Name this query **Paidup**.

4.   The bandleader has experienced difficult in securing the advertised material for the costumes in the third section. He has therefore decided to give a 15% rebate on the total payment made to all persons in this section. Calculate this rebate and show it along with the name, address and total payment of all persons in one named section. Name this query **Rebate**.

5.   As an incentive to attract more Female masqueraders to his band, the bandleader has decided to give a gift voucher to the value of 12% of the total payment to all females registered in the band. Show the name, sex, total payment and voucher value for all female revelers. Name this query **GiftVoucher**.

6.   Two revelers have asked to be refunded their payments, as they were forced to travel prior to the date of the carnival. Delete all records that pertain to these two named persons.

7.   Generate a report that shows the names, ID Number, section, age and total payments for all revelers who have paid in full for their costumes. The report should be grouped by section and sorted in descending order by LastName, then by FirstName. The report should calculate and show the total amount of funds paid by the revelers of each section. The average payment of each section should also be generated as well as the grand total of payments made. This report should be given a suitable title utilizing two lines.

Wordprocessing

1. Create a full page advertisement for a local newspaper that informs the public about your carnival band. This must be designed on letter size paper.

2. Using a suitable feature of your wordprocessing application, create a document which should be mailed to persons who have paid on full for their costumes. The document should inform masqueraders of the parade route, the time of assembly and departure of the band onto the parade.

    The report from the database section should be inserted into the document.

    The final paragraph should express the bandleaders gratitude to masqueraders for choosing to join their band for the carnival celebrations.

3. Design a suitable letterhead for your document which should be placed in a header.

    A suitable footer must be inserted, with the words center aligned.

4. The document should be justified. The left margin must be 1.5".

Problem-Solving

1. Develop an algorithm or write pseudocode that accepts as input the names of an unspecified number of masqueraders who each have paid the full cost of their costume and the amount each has paid. A masquerader may have paid for a costume in any of the five sections in the band. The algorithm should determine the section in which a masquerader plays based on the amount he/she has paid for the costume. The algorithm should also determine the number of masqueraders who have paid for costumes in each section. The names of persons and the section for which they have paid should be printed. A listing of section and the total number of persons registered to play in each section should also be printed, along with the total amount of money paid in each section.

2. Using data from your database, make a random listing of persons who have paid in full for their costumes. The listing should contain the IDNumber, and full amount paid by each masquerader for his/her costume and should be chosen randomly form each of the five sections. No more than twelve persons should be selected. Using this listing, design a trace table that traces the number of masqueraders in each section, the amount paid and traces the total amount collected in each section.

Program Implementation

3. Using the programming language Pascel. Write program code to implement the algorithm in (1).

CXC REQUIREMENTS

The following should be placed in a header at the top right hand corner of each page of all your documents (Word processing, spreadsheet, database management, problem-solving and program implementation):

Your Full Name
Candidate No:
Territory: Barbados
School: Advanced Management Services – Private
Centre Code: 030113

Each assignment should be place in a separate folder with a cover page stating the course, so you should have four (4) folders. The section e.g.(Word processing, spreadsheet, database and problem-solving and Program Implementation), proficiency and the following information.

E.g.

Your Full Name
Candidate No:
Territory: Barbados
School: Advanced Management Services – Private
Centre Code: 030113
Date:

Information Technology

SCHOOL BASED ASSESSMENT

(General)
PRACTICAL

Problem-Solving and Program Implementation

NAME: John Doe
CANDIDATE NO.:
TERRITORY: Barbados
SCHOOL: Advanced Management Services
CENTRE CODE: 030113
DATE: May/June 2020

Change name to suit

FINAL PRINT

What to Print

SPREADSHEET
- Masqueraders 1, 2 and 3
- Formulae page for masqueraders 3, sections 1 and 5 **ONLY**.
- Print charts only once.

DATABASE
- All three (3) tables
- Design view of all three (3) tables
- Queries – **Section, TwentiesLadies, Paidup, Rebate and GiftVoucher**
  - Design view for these queries
- Report – Question 7

WORDPROCESSING
- Advertisement
- Form Letter
- Merge letters – First two and last two **ONLY**.