STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086.

COURSE CODE: 19BA/MC/BA53

B.B.A DEGREE EXAMINATION – NOVEMBER 2021 BUSINESS ADMINISTRATION

COURSE : MAJOR - CORE

PAPER : BUSINESS ANALYTICS (Practical – Set 2)

TIME : 2 HOUR MAX. MARKS: 60

SECTION - A

Answer All The Questions:

 $(10 \times 3 = 30)$

1. Write SQL query to Create the below table and insert 5 records into the table (10 marks)

| EmpId | EmployeeName | Qualification | PhoneNo | Salary | Country |
|-------|--------------|---------------|------------|--------|-----------|
| 1001 | David | MBA | 9885624444 | 50000 | Srilanka |
| 1002 | Ram | MCOM | 9565656512 | 47000 | India |
| 1003 | Jackson | MSC | 8458733625 | 52000 | Australia |
| 1004 | Merlin | MCOM | 9252521485 | 47000 | India |
| 1005 | Mary | MCA | 8856888120 | 60000 | Srilanka |

Based on the above table write queries for the following:

- a. Display all records of the above table.
- b. Display the Empid, EmployeeName and Salary where Employee name starts with the letter M.
- c. Fetch the names of employee who earn the highest salary.
- d. Select all records where the Qualification column has the value MCOM or MBA.
- e. List the number of employees in each country.
- 2. a. Import the grades.csv file and create the following graph in Python

(5 marks)

- Construct histogram for the column total in grades file
- Give a title for the histogram created
- Give a title for the x axis and y axis
- Also give red color for the bars
- b. Using the grades.csv file, write python code for:

(5 marks)

• Printing the structure or type of data

- To display number of rows and columns in the file
- Generate the statistical summary of all the numerical features present in it
- Printing the Top 5 rows in the data
- Printing the Bottom 5 rows in the data
- 3. a) Create a text file called Employee.txt in the notepad by entering the below details:(5 marks)

 Column names are EmpNo, Name, Age, Gender, Salary

| 30 M 10,0000 |
|--------------|
| 35 M 90,0000 |
| 29 F 30,000 |
| 38 M 60,000 |
| 40 M 75,000 |
| |

Create a SAS data set named Empdetails. Use the INFILE statement to read the external data file in the code.

b) Locate the **HOLIDAY** data set from **SASHELP**.

(5 marks)

Create a subset of the HOLIDAY data set that contains only the holidays that fall in January. Name the new data set as **HolidayData** and have it created in the **WORK** library. How many observations are there in the subset?

SECTION – B Answer All questions:

 $(1 \times 30 = 30)$

4. a) Write a R program using data frame to create the below table

(5 marks)

| emp_id | emp_name | salary | start_date |
|--------|----------|--------|------------|
| 1 | David | 323.30 | 2022-01-01 |
| 2 | Jackson | 915.20 | 2021-09-23 |
| 3 | Michelle | 411.00 | 2021-11-15 |
| 4 | Jack | 929.00 | 2021-05-11 |
| 5 | Gary | 743.25 | 2021-03-27 |

For the data frame created above, write the R code to find:

(10 marks)

- Mean of the Salary data
- Median of the salary data
- Create a variable name dataset and extract columns emp_name and salary
- Retrieve the first 3 record
- Mode of the salary data
- Retrieve the number of rows and columns
- Variance in salary
- Standard deviation in salary
- Sum of salary
- Minimum in salary
- c) Import the csv file grades.csv in R

(5 marks)

Based on the imported file grades, create a stem and leaf graph for the variable total.

d) Based on the imported file grades, create scatter plot that satisfies the below criteria in R:

(10 marks)

- Plot for the variables total and percent
- Give a blue color to the plot
- Give a title to the plot created
- Give x label and y label
