Registration No.:

Total Number of Pages: 02

Course: MBA
Sub_Code: 18MBA302E

**2nd Semester Regular Examination: 2023-24**
**SUBJECT: Business Analytics**
**BRANCH(S): GM, MBA**
**Time: 3 Hour**
**Max Marks: 100**
**Q.Code: N543**

**Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.**
**The figures in the right hand margin indicate marks.**

**Part-I**

**Q1** **Answer the following questions:** **(2 x 10)**

a) Who is a Business Analyst? Define.
b) What is Business Analytics and Optimization?
c) What is R-Studio used for?
d) How many data types are there? Explain.
e) What are the different data structures in R? Briefly explain them.
f) What are the tools used to address the business problems?
g) Name some packages in R, which can be used for data imputation.
h) Which locations are offered by Excel to open a file?
i) What are the three types of frequency distributions? Explain.
j) What is the role of data visualization in managerial decision-making?

**Part-II**

**Q2** **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 × 8)**

a) Is Python better than R? Explain with reason.
b) How can data be distributed? What is an example of a data distribution?
c) What are the steps to build and evaluate a linear regression model in R?
d) What is a Non-Parametric Test? Explain different types of Non-Parametric Tests.
e) We know Python is all the rage these days. But to be truly accepting of a great technology, you must know its pitfalls as well. Explain.
f) What is the main purpose of data validation? What is the importance of the validation rule?
g) How to do regression with SPSS? How do you calculate correlation and regression in SPSS?
h) What is data storytelling and visualization? What are the different steps to visual data storytelling?
i) Explain the data slicing method. Which function is used for slicing the rows of a Data Frame?

j) What is a rattle in R used for? What version of R works with rattle? Explain.

k) Which regression technique is used in SPSS? Which regression model is most used?

l) What are t-tests () in R? What is the use of With () and By () functions in R?

## Part-III

**Only Long Answer Type Questions (Answer Any Two out of Four)**

**Q3** Can SPSS be used for confirmatory factor analysis? How do you report factor analysis results in SPSS? How do you interpret factor analysis? **(16)**

**Q4** What is Business Analytics and optimization? What are the three main components of Business Analysis? **(16)**

**Q5** "Analysis of qualitative data is best described as a progression, not a stage; an ongoing process, not a one-time event" - Discuss. Why and how are categorization and classification not seen separately in qualitative data analyses? **(16)**

**Q6** Compute Product Moment Correlation (r) and Rank Difference Correlation (p) between the following sets of scores: **(16)**

X: 50,42,51,26,35,42,60,41,70,55,62,38

Y: 62,40,61,35,30,52,68,51,84,63,72,80