

Total No. of Questions : 5]

SEAT No. : 

PA-4175

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[5946]-211

F.Y. M.B.A.

SC - BA - 01 : BASIC BUSINESS ANALYTICS USING R  
(2019 Pattern) (Semester - II) (205BA)



Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) All the questions carry equal marks.
- 2) All questions are compulsory.

**Q1)** Answer the following questions: (any five) **[10]**

- a) What are keywords/reserved words in R?
- b) What is the use of help ( ) function in R?
- c) Explain install packages ( ) function in R.
- d) List the features of R language.
- e) What are the skills required by a good business analyst?
- f) Define descriptive analytics.
- g) Define built in functions in R.

**Q2)** Answer the following: (any 2) **[10]**

- a) What are arithmetic operators in R. Elaborate any three arithmetic operators with example.
- b) Explain the importance of data in business analytics? Differentiate between data, information and knowledge with appropriate example.
- c) List the data structures in R. Explain vectors in detail with example.

**Q3) Answer the following: (any one)**

**[10]**

- a) What are data frames in R? What are the characteristics of a data frame? How to create a data frame. Discuss with an example how `str()` function and `summary()` function can be applied on data frame?
- b) Explain the following functions with example:
  - i) `sqrt()`
  - ii) `seq()`
  - iii) `class()`
  - iv) `paste()`
  - v) `head()`

**Q4) Answer the following: (any one)**

**[10]**

- a) Discuss the applications of business analytics in health care industry and retail.
- b) What is data visualization? Elaborate the need and importance of data visualization? Write and explain with R code how to visualize data using line plot and scatter plot.

**Q5) Answer the following: (any one)**

**[10]**

- a) How to read and write a CSV file and XLSX file? Which library is required to read and write
  - i) XLSX file
  - ii) My Sql data base
- b) Discuss the importance of loops in R. Elaborate for and while loops with examples.

