

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2022
(Fourth Semester)

Branch – COMMERCE (BUSINESS ANALYSTICS)

R PROGRAMMING

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 Name _____ is a sequence of data elements of the same basic type.
(i) Vector (ii) List
(iii) Matrix (iv) Data frame
- 2 State _____ constants can be represented using either single quotes(') or double quotes("") as delimiters.
(i) Character (ii) String
(iii) Numeric (iv) Built-in
- 3 Name _____ function is also helpful in creating frequency tables with condition and cross tabulations.
(i) Lapply() (ii) Table ()
(iii) Box plot () (iv) V Apply ()
- 4 We construct the transpose of a matrix by interchanging its columns and rows with the function _____.
(i) Tran () (ii) cbin ()
(iii) t () (iv) tmatrix ()
- 5 The structure of the data frame can be seen by using _____ function.
(i) Str () (ii) Structure ()
(iii) S () (iv) Sr ()
- 6 The _____ function is used to combine values.
(i) cp () (ii) C ()
(iii) Concat () (iv) Vec ()
- 7 Identify _____ loop is used to loop a particular statement until a specific condition is met.
(i) Repeat (ii) For
(iii) While (iv) Do While
- 8 The next statement can be used to discontinue one particular cycle and skip to the next part of the loop.
(i) Break () (ii) For ()
(iii) Next () (iv) While ()
- 9 A _____ plot provides a graphical view of the relationship between two sets of numbers.
(i) Scatter (ii) Strip
(iii) Box (iv) Bar
- 10 R can draw both vertical and horizontal bars in the _____.
(i) Pie chart (ii) Box plots
(iii) Strip chart (iv) Bar chart

Cont...

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a Discuss on data permanency and removing objects.
OR
b Comprehend on character and index vector in R with example.
- 12 a Discuss on the concept of arrays in R with example.
OR
b Write short notes on ordered factors with example.
- 13 a How to create a list in R? Give examples for modifying list.
OR
b Write on read table () and scan () function in R. Give example
- 14 a Explain on while loop in R. Give example.
OR
b Briefly explain if statement with syntax and an example.
- 15 a Write short notes on plot () function with example.
OR
b Discuss on low level plotting commands.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Develop in detail about logical, character and index vectors with example.
- 17 Briefly discuss on T apply () function with example.
- 18 Elaborate on attach () and detach () functions in data frames. Give examples.
- 19 Comprehend about for Loop, Repeat in R. Give example.
- 20 Examine on interacting with graphics in R. Give example.

Z-Z-Z

END