

# Progressive Education Society's Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16 (Autonomous)

# End Semester Examination: December 2023 Faculty: Commerce

Program: BBA (Computer Application) Semester: III SET: B

Program (Specific): BBACA07 Course Type: CC

Class: S.Y.B.B. A(CA) Max.Marks: 70

Name of the Course: Big Data Analytics

Course Code: 23-BBACA235 Time: 2:30 Hrs

Paper: -

#### **Instructions to the candidate:**

- 1) There are 4 sections in the question paper. Write each section on separate page.
- 2) All Sections are compulsory.
- 3) Figures to the right indicate full marks.
- 4) Draw a well labelled diagram wherever necessary.

#### **SECTION: A**

# Q1) Answer the following. [1\*10=10 marks]a) answer the question "What has happened?" Descriptive analytics iii) Predictive analytics iii) Prescriptive i) analytics iv) Diagnostic analysis b) answers the question "What will happen?" i) Descriptive analytics ii) Predictive analytics iii) Prescriptive analytics iv) Simple analysis c) When data are collected in a statistical study for only a subset of all elements of interest we are using\_\_\_\_\_ i) ii) Population iii) Parameter iv) Coefficient Sample

d)is most important language for Data Science.
i) R ii) Java iii) C++ iv) C
e) In Statistics, a population consist of
i) All people living in a Country. ii) All people living in the city are under
Study. iii) All subjects or objects whose characteristics are being studied.
iv) All people not living in a Country.
f) Collection of objects currently stored in R is called as
i) Workspace ii) Package iii) list iv) taks
g) File Containing R Scripts end with extension
i) .S ii) .R iii) .RP iv) .SP
h) To select Columns(Vaiables)function is used.
i) Select() ii) Filter () iii) Mutate() iv) Sumarise()
i) Unsupervised learning makes sense of data without having any predefined
dataset for its training.
i) Unlabeled ii) Labeled iii) Semi-labeled iv) Prelabeled
j) Wich is not basic class of object in R.
i) Character ii) Number iii) Integer iv) String
SECTION: B
Q2) Attempt the following (any 10) [2*10= 20 marks]
a) What is sampling.
b) Define Population.
c) Enlist components of Data Science.
d) What is Digital Data?
e) Enlist tools used for Big Data.

- f) Define descriptive Analytics.
- g) Define head() and tail()
- h) What is Big Data?
- i) What is supervised machine learning?
- j) What is Regression Analysis?
- k) What is WEKA?
- 1) What is Data Visualization?

### **SECTION:C**

## Q3) Attempt the following (any 4)

[4\*5=20 marks]

- a) Explain Data Frame with Syntax and Example.
- b) Differentiate between Structed Data and Semi structured Data.
- c) Explain the process of data analysis.
- d) Explain 5 V's of Big Data in detail.
- e) Write installation process of RStudio in detail.
- f) Explain types of regression model.

#### **SECTION:D**

# Q4) Attempt the following (any 4)

[4\*5=20 marks]

- a) What is histogram? Explain with example of R Program.
- b) Write an R program to find the maximum and the minimum value of a given vector.
- c) Write an R program to find Sum, Mean and Product of a Vector.
- d) Write an R program to create a Data frame which contains details of 5 employees and display the details in ascending order.
- e) Explain Loops in R with example.
- f) Explain advantages of Machine Learning.