

Total No. of Questions : 5]

SEAT No. :

**P2133**

[Total No. of Pages : 2

**[5803]-306**

**S.Y. B.B.A. (CA)**

**CA-305 : BIGDATA**

**(2019 CBCS Pattern) (Semester - III)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Figures to right indicate marks.*

**Q1)** Attempt any EIGHT of the following.

**[8×2=16]**

- a) What is big data?
- b) What is Data Analytics?
- c) What is population?
- d) Define sample.
- e) What is machine learning?
- f) What is KNN?
- g) Define EM algorithm.
- h) Define market basket analysis.
- i) What is Apriori algorithm?
- j) What is R?

**Q2)** Attempt any FOUR of the following.

**[4×4=16]**

- a) Explain the types of Data Analytics.
- b) Explain correlation with its type.
- c) Explain support vector machine with example.
- d) Explain Machine learning.
- e) Explain Association rule mining.

**P.T.O.**

**Q3)** Attempt any Four of the following.

**[4×4=16]**

- a) How Naive Bayes algorithm works.
- b) Explain Decision tree with example.
- c) Explain the application of big data.
- d) Explain cluster analysis with its types.
- e) What is digital data? Explain its type.

**Q4)** Attempt any Four of the following.

**[4×4=16]**

- a) What is regression? Explain with its type.
- b) Explain the five applications of machine learning.
- c) Write an R program to find the maximum and the minimum value of a given vector.
- d) Write an R program to compare two data frames to find the elements in first data frame that are not present in second data frame.
- e) Write an R program to find Sum, Mean and Product of a Vector.

**Q5)** Write a short note on any TWO of the following.

**[2×3=6]**

- a) Population and sample.
- b) Data Visualisation.
- c) Data types in R.

