LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc.DEGREE EXAMINATION –COMPUTER SCIENCE

FIRST SEMESTER – APRIL 2018

17PCS1MC01– DATA MINING

Date: 25-04-2018   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

SECTION-A

ANSWER ALL THE QUESTIONS: **(10*2=20)**

1. Define Data Mining.
2. Write the syntax to read data in R.
3. Define Classification.
4. Differentiate supervised and unsupervised learning.
5. Define cluster.
6. What are outliers?
7. What is density reachable?
8. Define Time series data.
9. Define association rule mining.
10. What is support?

SECTION-B

ANSWER ALL THE QUESTIONS: **(5*8=40)**

11. a) Explain Import from and Export to .csv files in R.

    (OR)

    b) Explain about data exploration.
12. a) Explain the linear regression with example.
    (OR)
    b) Explain the logistic regression with example.
13. a) Explain the K-Means Clustering with example.
    (OR)
    b) Explain the Divisive Analysis clustering.
14. a) Explain about Time series data.
    (OR)
b) Explain about Time series forecasting.
15. a) Explain about association rule mining.
    (OR)
    b) Describe the classification of association rule mining.

SECTION-C

ANSWER ANY TWO: **(2X20=40)**

16. i) Discuss in detail about Classification and Regression Trees with example. (10)
    ii) Discuss in detail about Random Forest algorithm. (10)
17. i) Explain the K-Medoids Clustering with example. (10)
    ii) Discuss in detail about Time series decomposition. (10)
18. i) Explain about FP – Growth algorithm with example. (10)
    ii) Discuss in detail about Apriori algorithm with example. (10)

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