



Date: 02-04-2019

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**SECTION-A**

**(10x2=20)**

**Answer all the questions**

1. Define Data Mining.
2. Write the syntax to create a series in R.
3. Define Decision Trees.
4. What is regression? Write the expression for linear regression.
5. What are outliers?
6. Define Cluster analysis
7. Differentiate trend and seasonal in time series.
8. Write the syntax to convert the data in to time series.
9. Define association rule mining.
10. What is confidence?

**SECTION-B**

**Answer all the questions**

**(5x8=40)**

11. a) How to save and load R data? Give example.  
(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 Divisive clustering methods.
14. a) What are time series data? How will you generate the series? Detect outliers from time series data and plot them .  
(OR)  
b) Explain about Time series forecasting.
15. a) How will you represent the association rules through parallel coordinate plot.  
(OR)  
b) Explain the Interpretation of association rules with example.

**SECTION-C**

**Answer any TWO questions**

**(2x20=40)**

16. i) Explain the following Charts with an example  
a) Scatter Plot b) 3D Scatter Plot c) Level plot d) Contour Plot.(10)  
ii) Discuss in detail about Classification and Regression Trees with example. (10)
17. i) Explain K- Medoid clustering and hierarchical clustering with example. (10)  
ii) Explain time series classification with extracted features. (10)
18. i) Describe the classification of association rule mining. (10)  
ii) Explain outlier detection through LOF and clustering with example. (10)

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