Total No. of Questions : 10]

SEAT No. :

P3975

[Total No. of Pages : 2

[5561]-679
B.E.(Computer Engineering)
DATA ANALYTICS
(2015 Pattern) (Semester - I) (410243)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right side indicate full marks.***
4) ***Assume suitable data if necessary.***

Q1) a) What is big data? Explain 3V's of Big Data. **[5]**

b) Draw Data Analytics Lifecycle & give brief description about all phases. **[5]**

OR

Q2) a) Write a case study on Global Innovation Network & Analysis (GINA). **[5]**

b) Explain Null Hypothesis & Alternative Hypothesis. **[5]**

Q3) a) How Wilcoxon Rank-Sum Test works? **[5]**

b) Explain Type 1 and Type 2 errors. **[5]**

OR

Q4) a) Write an Apriori Algorithm. **[5]**

b) Define following terms with example : Confidence and Lift. **[5]**

Q5) a) Explain following Decision Tree Algorithms : **[9]**

i) ID3 Algorithm

ii) C4.5

iii) CART

b) How Naive Baye's classification works? Give its applications. **[8]**

OR

P.T.O.

Q6) a) Explain following terms : **[9]**

i) Bagging

ii) Boosting

iii) Random forest

b) What is data visualization? Describe any four data visualization techniques. **[8]**

Q7) a) Why is it difficult to visualize Big Data? Also explain analytical techniques used in Big Data Visualization. **[9]**

b) Explain various tools to visualize Big Data. (Any four) **[8]**

OR

Q8) a) What is Map-Reduce? Explain working of Map-Reduce with example. **[9]**

b) Explain HDFS with respect to NameNode, DataNodes, Secondary NameNode with example. **[8]**

Q9) a) Explain following terms : **[8]**

i) Smoothing

ii) Confusion matrix

b) Explain Data Visualization Tool - Tableau. **[8]**

OR

Q10)a) Explain following terms : **[8]**

i) Key-value store

ii) Document store

iii) Column family store

iv) Graph Databases

b) Why communication is important in data analytics lifecycle projects? **[8]**

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