Total No. of Questions: 5]
P7265

SEAT No. : $\square$
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F.Y.M.B.A

SC-BA- 02: DATA MINING
(2019 Patternfó (Semester - II) (206 BA)

Time: 2½ Hours]
[Max. Marks : 50
Instructions to the candidges:

1) All questionsare compulsory.
2) Figure to the right indicate marks for questions/sub questions.

Q1) Solve Any Five :
a) What is Data Mining?
b) What is Data Preprocessing?
c) What is Association Analysis? Givean Example.
d) What is Clustering? List the methods of clustering.
e) What is Classification: Name any two Algorithms used for it.
f) What is big data Analysis?
g) What is ratio data? Write any two characteristics of ratio data.
h) What is the role ef.Business intelligence in decision making

Q2) Solve Any Two :
a) Why data cleaning is needed before data analysis?
b) Explain Hierarchical clustering giving a suitable example.
c) Explain Decision - tree Approach of data (clássification.

Q3) Apply Apriori Algorithm to the giyen dataset to find frequent itemsets. (Given support value $=40 \%$ )

| Tid | Items Purchased |
| :---: | :---: |
| 100 | Bread, Milk,Cake |
| 101 | Bread, Diaper, Beer |
| 102 | Milk, Diaper, Beer, Eggs |
| 103 | Bread, Milk, Diaper, Beer |
| 104 | Bread, Milk, Diaper, Cake |

Consider the dataset given below and cluster the dataset by using Hierarchical clustering and plot the dendogram for it.


Q4) Explain the use of Association Analysis in purchasing behaviour of the customers.

Explain the Density based Clustering method giving o suitable example.

Q5) Elaborate the use of data mining in target Markeing
OR
Elaborate the use of data mining for customer profiling.

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