25 Feb. 2023

Total	No.	Of Questions	:	5]	
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PA-4176
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SEAT No.	:	
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[Total No. Of Pages: 2

.946]-212 M.B.A.

## (SC-BA-02): Data Mining (Business Analytics) (2019 Pattern) (206BA) (Semester-II)

Time: 2½ Hours]

[Max. Marks: 50

Instructions to the candidates:

- 1) Attempt all questions.
- 2) Figures to right indicate marks.
- 3) State your assumptions clearly.

## Q1) Solve any Five questions:

 $[5 \times 2 = 10]$ 

- a) Define the term Data Mining.
- b) Define clustering with example.
- c) Explain Data Normalization.
- d) Explain the concept of predictive modeling.
- e) What is outlier in mining algorithm?
- f) What is association rule?
- g) Write the importance of feature selection.
- h) Explain the term customer profiling.

## Q2) Solve any Two questions:

 $[2 \times 5 = 10]$ 

- a) What is Big data? Write it's characteristics.
- b) Explain the data preprocessing process with suitable example.
- c) Elaborate market segmentation in product distribution with suitable example.

Q3) a) Discuss Decision-Tree Based approach with suitable example.

OR

- b) Explain any two applications of data mining.
- Q4) a) Discuss clustering w.r.t. partitional and Hierarchical clustering methods. [10]
  - b) Write detail note on Density-based clustering in data mining with example.
- Q5) a) Discuss Apriori Algorithm.

[10]

[10]

OR

b) Write short notes (any Two):

 $[2\times 5=10]$ 

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- i) B<sub>2</sub>B customer buying path analysis
- ii) Data cleaning
- iii) Big data analytics in business environment.

Total No. of Questions: 5]

SEAT No.:

P7265

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## [5860]-212 F.Y.M.B.A

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

Time: 21/2 Hours]

IMax. Marks: 50

Instructions to the candidates:

- 1) All questions are compulsory.
- 2) Figure to the right indicate marks for questions/sub questions.
- Q1) Solve Any Five:

[10]

- a) What is Data Mining?
- b) What is Data Preprocessing?
- c) What is Association Analysis? Give an 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 of Business intelligence in decision making?
- Q2) Solve Any Two:

[10]

- a) Why data cleaning is needed before data analysis?
- b) Explain Hierarchical clustering giving a suitable example.
- c) Explain Decision tree Approach of data classification.

Q3) Apply Apriori Algorithm to the given dataset to find frequent itemsets. (Given support value = 40%) [10]

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

OR

Consider the dataset given below and cluster the dataset by using Hierarchical clustering and plot the dendogram for it. [10]

Item	A	В	C	D	E
A	0			Description of the second	3
В	7	0	,0	7 6	SY
С	2	5	0	3	
D	,6	4	80	0	
Е	10	8	√³3	7	0

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

OR

Explain the Density - based Clustering method giving a suitable example.

[10]

Q5) Elaborate the use of data mining in target Marketing,

[10]

OR

Elaborate the use of data mining for customer profiling.

[10]

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Total No. of Questions : 5] SEAT No.: PB2068 [Total No. of Pages: 2 [6201]-213 First Year M.B.A. 206-BA-SC-BA-02: DATA MINING (Revised 2019 Pattern) (Semester - II) Time: 21/2 Hours] [Max. Marks: 50 Instructions to the candidates: All questions are compulsory. 2) Figures to the right indicate full marks for questions/sub question. Q1) Solve any Five [10]Define Big Data. a) b) What is Big Data Analysis? State any 2 examples of real world data mining application. c) d) Define Descriptive Model. What is Data Cleaning? e) List types of Data. f) Name the 6Vs of Big Data. g) What is the role of Business Intelligence in decession making? h) 02) Solve any two [10]Differentiate between partitional and Hierarchical clustering method. a) Explain the role of Support Vector Machine (SVM) in building b) classification model. Explain decision tree approach of data calssification. c) Apply agriori Algorithm to the given dataset to find frequent item sets *O3)* a) (Given support value = 40%, confidence 40%) A Collain [10]

Tid	Jem Purchased
$T_1$	A,B,C
$T_2$	A,B,C,D,E
$T_3$	A,C,D
$T_4$	A,C,D,E
T <sub>5</sub>	A,B,C,D

OR

Apply the decision-tree-based approach to classify B2B customer buying b) stages and provide recommendations for targeted marketing strategies.

- Q4) a) With the help suitable example explain density based clusteing method. [10] OR
  - b) "Graph based algorithms in clustering is the best method". Justify the statement with suitable example.
- Q5) a) Elaborate the use of data mining in the Target Markets.

[10]

OR

b) Elaborate the use of Data Mining for customer profiling.

