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Roll No

MCSE-301(A)

M.E./M.Tech., III Semester

Examination, December 2020

Data Warehousing and Mining

(Elective - I)

Time : Three Hours

Maximum Marks: 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Explain major requirements and challenges in data mining. 7
b) Explain the various data mining repositories on which mining can be performed. 7
2. a) Explain the data pre-processing techniques in detail. 7
b) Discuss about some of the case studies in data mining applications. 7
3. a) Explain spatial mining and time series mining. 7
b) Explain briefly the differences between “classification” and “clustering” and give an informal example of an application that would benefit from each techniques. 7
4. a) Define frequent sets, confidence and support and association rule. 7
b) Discuss the importance of Association Rule Mining. 7

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5. a) Consider the Data set D. Given the minimum support 2, apply apriori algorithm on this dataset. 7

Transaction ID	Items
100	A, C, D
200	B, C, E
300	A, B, C, E
400	B, E

- b) Explain the following clustering methods in detail: 7
- i) BIRCH
 - ii) CURE
6. Explain the following in data mining: 14
- a) Genetic Algorithm
 - b) Decision tree
 - c) Episode discovery
 - d) Event Prediction
7. a) Explain the content based image and video retrieval. 7
- b) Explain Image and video representation techniques. 7
8. Write and explain the algorithm for mining frequent item sets without candidate generation. Give relevant example. 14
