

[4]

Or

Explain web mining in detail.

SECTION 'C'

12 × 5 = 60

(Long Answer Type Questions)

Note : Answer the following questions in 500 words.

1. Explain the typical OLAP operation with an example.

Or

What is data mining functionality ? Explain different types of data mining functionality with example.

2. List and describe the five primitive for specifying a data mining task.

Or

Describe the architectural view of data mining system. Also explain each component briefly.

3. Explain Apriori algorithm with an example.

Or

Explain the various approaches for mining multilevel association rules.

4. Explain major clustering methods in detail. (any two)

Or

Explain cluster analysis technique in detail. (any two)

5. What is multimedia database ? Explain the methods of mining multimedia database.

Or

Describe in detail about the various applications of data mining in finance, biomedical science and retail.

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G-3/328/21

Roll No.....

III Semester Examination, April-2021

M.Sc.

INFORMATION TECHNOLOGY

Paper IV

(Data Mining and Warehousing)

Time : 3 Hours]

[Maximum Marks : 100

Note : All questions are compulsory. Question Paper comprises of 3 sections. **Section A** is objective type/Multiple Choice questions with no internal choice. **Section B** is short answer type with internal choice. **Section C** is long answer type with internal choice.

SECTION 'A'

(Objective Type Questions)

Choose the correct answer :

1 × 10 = 10

1. Data mining is :

- (a) Time variant non-volatile collection of data
- (b) The actual discovery phase of a knowledge
- (c) The stage of selecting the right data
- (d) None of these

2. OLAP is used to explore theknowledge.

- (a) Shallow
- (b) Deep
- (c) Multidimensional
- (d) Hidden

3. Which of the following is finally produced by Hierarchical clustering ?

- (a) final estimate of cluster centroids
- (b) tree showing how close thing are to each other

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- (c) Assignment of each point to clusters
 - (d) All of the mentioned
4. Which of the following is required by K-means clustering ?
- (a) Defined distance metric
 - (b) Number of clusters
 - (c) Initial guess of cluster centroids
 - (d) All of the mentioned
5.analysis divides data into groups that are meaningful, useful or both.
- (a) Cluster
 - (b) Association
 - (c) Classification
 - (d) Relation
6. Which of the following is the data mining tool ?
- (a) Borlan C
 - (b) Weka
 - (c) Borlan C ++
 - (d) Visual C
7. What techniques can be used to improve the efficiency of apriari algorithm ?
- (a) flash-based techniques
 - (b) transaction increases
 - (c) sampling
 - (d) cleaning
8. What does FP Tree growth algorithm do ?
- (a) All frequent patterns through purning rules with lesser support
 - (b) All frequent patterns through purning rules with higher support

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- (c) All frequent patterns by constructing an item set
 - (d) All frequent patterns by constructing a FP-Tree
9. Web mining is the application of
- (a) Data mining
 - (b) Text mining
 - (c) Both (a) and (b)
 - (d) None of these
10. Text analytics, also referred to as text mining.
- (a) True
 - (b) False
 - (c) Both of (a) and (b)
 - (d) none of these

SECTION 'B'

6 × 5 = 30

(Short Answer Type Questions)

Note : Answer the following questions in 250 words.

1. Explain the Architecture of warehouse.

Or

Discuss major issues in data mining.

2. Discuss the activities of data cleaning with the process associated with it.

Or

What is data reduction ? Explain in detail.

3. Explain Bayesian classification in detail.

Or

Describe classification of Back-propagation.

4. Explain Hierachical clustering methods.

Or

Describe Grid-Based clustering methods.

5. Explain text mining in detail.