

2017

Time: 3 hours

Full Marks: 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answers from all the Groups as directed.

Group – A

(Compulsory)

1. Choose the correct answer from the given alternatives: 1x15=15

a) _____ is an essential process where intelligent methods are applied to extract data pattern.

- i. Data warehousing
- ii. Data mining
- iii. Text mining
- iv. Data selection

b) _____ is a summarization of the general characteristics or features of a target class of data.

- i. Data characterization
- ii. Data classification
- iii. Data discrimination
- iv. Data selection

- c) Strategic value of data mining is _____.
- i. Cost-sensitive
 - ii. Work-sensitive
 - iii. Time-sensitive
 - iv. Technical-sensitive
- d) _____ is the process of finding a model that describes and distinguishes data classes concept.
- i. Data characterization
 - ii. Data classification
 - iii. Data discrimination
 - iv. Data selection
- e) The Full Form of KDD is _____
- i. Knowledge database
 - ii. Knowledge discovery database
 - iii. Knowledge data house
 - iv. Knowledge data definition
- f) The output of KDD is:
- i. Data
 - ii. Information
 - iii. Query
 - iv. Useful information
- g) Which of the following is not a data mining functionality?
- i. Characterization of discrimination
 - ii. Classification and regression
 - iii. Selection and interpretation
 - iv. Clustering and analysis
- h) The full form of OLAP is:
- i. Online Analytical Processing

- ii. Online Advanced Processing
 - iii. Online Advanced Preparation
 - iv. Online Analytical Performance
- i) The data is stored, retrieved and updated in _____.
- i. OLAP
 - ii. OLTP
 - iii. SMTP
 - iv. FTP
- j) _____ is a good alternative to the star schema.
- i. Star Schema
 - ii. Snow Flake Schema
 - iii. Fact Constellation
 - iv. Star-Snow Flake Schema
- k) The type of relationship in Star Schema is _____.
- i. Many to many
 - ii. One to one
 - iii. One to many
 - iv. Many to one
- l) Which of the following is not a kind of data warehouse application?
- i. Information processing
 - ii. Analytical processing
 - iii. Data mining
 - iv. Transaction processing
- m) Which of the following is not a component of a data warehouse?
- i. Metadata
 - ii. Current detail data

- iii. Lightly summarized data
 - iv. Component key
- n) The _____ allows the selection of the relevant information necessary for the warehouse.
- i. Top-down view
 - ii. Data warehouse view
 - iii. Data source view
 - iv. Business query view
- o) An _____ system is market-oriented and used for data analysis by knowledge workers, including managers, executive and analysis.
- i. OLAP
 - ii. OLTP
 - iii. Both (i) and (ii)
 - iv. None of the above

Group – B

Answer any **four** questions of the following: 5x4=20

2. What is Data Warehousing?
3. Why should you put your data warehouse on a different system than your OLTP system?
4. Explain about different methods used for mining text databases.
5. Discuss about web mining.
6. Explain major issues in data mining.
7. Discuss about data mining functionalities.
8. Discuss about prediction.
9. Explain about various OLAP operation.

Group – C

Answer any **five** questions of the following:

7x5=35

10. Describe why it is important to have a data mining query language.
11. Briefly discuss about data integration and data transformation.
12. Explain data mining as a step in the process of knowledge discovery.
13. Discuss the role of data compression and numerosity reduction in data reduction process.
14. Explain the different types of data types used in cluster analysis.
15. What is meant by outlier analysis? Discuss about any one outlier detection.
16. Draw and explain the architecture of on-line analytical mining.
17. Differentiate operational database systems and data warehouse.

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