

Data Warehouse and OLAP Technology - MCQs & Fill in the Blanks

Multiple Choice Questions (MCQs)

Topic 1 Data Warehouse and OLAP Technology

1. What is a Data Warehouse?

- A. A system for transactional processing
- B. A repository of information collected from multiple sources
- C. A temporary data store
- D. A method of ETL processing

*****Answer: B*****

2. Which of the following is a characteristic of a Data Warehouse?

- A. Volatile
- B. Non-Volatile
- C. Real-Time
- D. Distributed

*****Answer: B*****

3. The architecture of a Data Warehouse includes?

- A. ETL Process
- B. Data Storage
- C. Metadata
- D. All of the above

*****Answer: D*****

4. What is OLAP used for?

- A. Online Transaction Processing
- B. Analyzing business data

- C. C. Data Cleansing
- D. D. Backup and Recovery

*****Answer: B*****

5. A Data Mart is?

- A. A. A large-scale data warehouse
- B. B. A subset of a data warehouse
- C. C. A type of OLAP operation
- D. D. An ETL tool

*****Answer: B*****

6. What is a Data Warehouse?

- A. A. A system for transactional processing
- B. B. A repository of information collected from multiple sources
- C. C. A temporary data store
- D. D. A method of ETL processing

*****Answer: B*****

7. Which of the following is a characteristic of a Data Warehouse?

- A. A. Volatile
- B. B. Non-Volatile
- C. C. Real-Time
- D. D. Distributed

*****Answer: B*****

8. The architecture of a Data Warehouse includes?

- A. A. ETL Process
- B. B. Data Storage
- C. C. Metadata

D. D. All of the above

*****Answer: D*****

9. What is OLAP used for?

A. A. Online Transaction Processing

B. B. Analyzing business data

C. C. Data Cleansing

D. D. Backup and Recovery

*****Answer: B*****

10. A Data Mart is?

A. A. A large-scale data warehouse

B. B. A subset of a data warehouse

C. C. A type of OLAP operation

D. D. An ETL tool

*****Answer: B*****

11. What is a Data Warehouse?

A. A. A system for transactional processing

B. B. A repository of information collected from multiple sources

C. C. A temporary data store

D. D. A method of ETL processing

*****Answer: B*****

12. Which of the following is a characteristic of a Data Warehouse?

A. A. Volatile

B. B. Non-Volatile

C. C. Real-Time

D. D. Distributed

*****Answer: B*****

13. The architecture of a Data Warehouse includes?

- A. A. ETL Process
- B. B. Data Storage
- C. C. Metadata
- D. D. All of the above

*****Answer: D*****

14. What is OLAP used for?

- A. A. Online Transaction Processing
- B. B. Analyzing business data
- C. C. Data Cleansing
- D. D. Backup and Recovery

*****Answer: B*****

15. A Data Mart is?

- A. A. A large-scale data warehouse
- B. B. A subset of a data warehouse
- C. C. A type of OLAP operation
- D. D. An ETL tool

*****Answer: B*****

16. What is a Data Warehouse?

- A. A. A system for transactional processing
- B. B. A repository of information collected from multiple sources
- C. C. A temporary data store
- D. D. A method of ETL processing

*****Answer: B*****

17. Which of the following is a characteristic of a Data Warehouse?

- A. A. Volatile
- B. B. Non-Volatile
- C. C. Real-Time
- D. D. Distributed

*****Answer: B*****

18. The architecture of a Data Warehouse includes?

- A. A. ETL Process
- B. B. Data Storage
- C. C. Metadata
- D. D. All of the above

*****Answer: D*****

19. What is OLAP used for?

- A. A. Online Transaction Processing
- B. B. Analyzing business data
- C. C. Data Cleansing
- D. D. Backup and Recovery

*****Answer: B*****

20. A Data Mart is?

- A. A. A large-scale data warehouse
- B. B. A subset of a data warehouse
- C. C. A type of OLAP operation
- D. D. An ETL tool

*****Answer: B*****

21. What is a Data Warehouse?

- A. A system for transactional processing
- B. A repository of information collected from multiple sources
- C. A temporary data store
- D. A method of ETL processing

*****Answer: B*****

22. Which of the following is a characteristic of a Data Warehouse?

- A. Volatile
- B. Non-Volatile
- C. Real-Time
- D. Distributed

*****Answer: B*****

23. The architecture of a Data Warehouse includes?

- A. ETL Process
- B. Data Storage
- C. Metadata
- D. All of the above

*****Answer: D*****

24. What is OLAP used for?

- A. Online Transaction Processing
- B. Analyzing business data
- C. Data Cleansing
- D. Backup and Recovery

*****Answer: B*****

25. A Data Mart is?

- A. A large-scale data warehouse

- B. B. A subset of a data warehouse
- C. C. A type of OLAP operation
- D. D. An ETL tool

*****Answer: B*****

Topic 2: Introduction to Data Mining

26. What is Data Mining?

- A. A. Extracting useful information from large data sets
- B. B. Storing transactional data
- C. C. A process of data replication
- D. D. An alternative to OLAP

*****Answer: A*****

27. Which of the following is NOT a data mining functionality?

- A. A. Classification
- B. B. Regression
- C. C. ETL Processing
- D. D. Clustering

*****Answer: C*****

28. Data Mining helps in?

- A. A. Finding hidden patterns
- B. B. Creating data backups
- C. C. Replacing databases
- D. D. Encrypting data

*****Answer: A*****

29. A decision tree is used in?

- A. A. Classification

- B. B. Data Warehouse
- C. C. OLAP
- D. D. Data Integration

*****Answer: A*****

30. What are the major issues in data mining?

- A. A. Data privacy
- B. B. Data security
- C. C. Scalability
- D. D. All of the above

*****Answer: D*****

31. What is Data Mining?

- A. A. Extracting useful information from large data sets
- B. B. Storing transactional data
- C. C. A process of data replication
- D. D. An alternative to OLAP

*****Answer: A*****

32. Which of the following is NOT a data mining functionality?

- A. A. Classification
- B. B. Regression
- C. C. ETL Processing
- D. D. Clustering

*****Answer: C*****

33. Data Mining helps in?

- A. A. Finding hidden patterns
- B. B. Creating data backups

C. C. Replacing databases

D. D. Encrypting data

*****Answer: A*****

34. A decision tree is used in?

A. A. Classification

B. B. Data Warehouse

C. C. OLAP

D. D. Data Integration

*****Answer: A*****

35. What are the major issues in data mining?

A. A. Data privacy

B. B. Data security

C. C. Scalability

D. D. All of the above

*****Answer: D*****

36. What is Data Mining?

A. A. Extracting useful information from large data sets

B. B. Storing transactional data

C. C. A process of data replication

D. D. An alternative to OLAP

*****Answer: A*****

37. Which of the following is NOT a data mining functionality?

A. A. Classification

B. B. Regression

C. C. ETL Processing

D. D. Clustering

*****Answer: C*****

38. Data Mining helps in?

- A. A. Finding hidden patterns
- B. B. Creating data backups
- C. C. Replacing databases
- D. D. Encrypting data

*****Answer: A*****

39. A decision tree is used in?

- A. A. Classification
- B. B. Data Warehouse
- C. C. OLAP
- D. D. Data Integration

*****Answer: A*****

40. What are the major issues in data mining?

- A. A. Data privacy
- B. B. Data security
- C. C. Scalability
- D. D. All of the above

*****Answer: D*****

41. What is Data Mining?

- A. A. Extracting useful information from large data sets
- B. B. Storing transactional data
- C. C. A process of data replication
- D. D. An alternative to OLAP

*****Answer: A*****

42. Which of the following is NOT a data mining functionality?

- A. A. Classification
- B. B. Regression
- C. C. ETL Processing
- D. D. Clustering

*****Answer: C*****

43. Data Mining helps in?

- A. A. Finding hidden patterns
- B. B. Creating data backups
- C. C. Replacing databases
- D. D. Encrypting data

*****Answer: A*****

44. A decision tree is used in?

- A. A. Classification
- B. B. Data Warehouse
- C. C. OLAP
- D. D. Data Integration

*****Answer: A*****

45. What are the major issues in data mining?

- A. A. Data privacy
- B. B. Data security
- C. C. Scalability
- D. D. All of the above

*****Answer: D*****

46. What is Data Mining?

- A. A. Extracting useful information from large data sets
- B. B. Storing transactional data
- C. C. A process of data replication
- D. D. An alternative to OLAP

*****Answer: A*****

47. Which of the following is NOT a data mining functionality?

- A. A. Classification
- B. B. Regression
- C. C. ETL Processing
- D. D. Clustering

*****Answer: C*****

48. Data Mining helps in?

- A. A. Finding hidden patterns
- B. B. Creating data backups
- C. C. Replacing databases
- D. D. Encrypting data

*****Answer: A*****

49. A decision tree is used in?

- A. A. Classification
- B. B. Data Warehouse
- C. C. OLAP
- D. D. Data Integration

*****Answer: A*****

50. What are the major issues in data mining?

- A. A. Data privacy
- B. B. Data security
- C. C. Scalability
- D. D. All of the above

*****Answer: D*****

Topic 3: Preprocessing

51. What is Data Preprocessing?

- A. A. Cleaning and transforming raw data
- B. B. Storing data in warehouses
- C. C. Performing OLAP operations
- D. D. Encrypting data

*****Answer: A*****

52. Data Quality includes?

- A. A. Accuracy
- B. B. Completeness
- C. C. Consistency
- D. D. All of the above

*****Answer: D*****

53. Which of the following is NOT a data preprocessing technique?

- A. A. Data Cleaning
- B. B. Data Reduction
- C. C. Data Migration
- D. D. Data Transformation

*****Answer: C*****

54. Handling missing values in data preprocessing is done by?

- A. A. Mean Substitution
- B. B. Data Reduction
- C. C. Data Clustering
- D. D. Data Mining

*****Answer: A*****

55. Data transformation includes?

- A. A. Normalization
- B. B. Smoothing
- C. C. Aggregation
- D. D. All of the above

*****Answer: D*****

56. What is Data Preprocessing?

- A. A. Cleaning and transforming raw data
- B. B. Storing data in warehouses
- C. C. Performing OLAP operations
- D. D. Encrypting data

*****Answer: A*****

57. Data Quality includes?

- A. A. Accuracy
- B. B. Completeness
- C. C. Consistency
- D. D. All of the above

*****Answer: D*****

58. Which of the following is NOT a data preprocessing technique?

- A. A. Data Cleaning

- B. B. Data Reduction
- C. C. Data Migration
- D. D. Data Transformation

*****Answer: C*****

59. Handling missing values in data preprocessing is done by?

- A. A. Mean Substitution
- B. B. Data Reduction
- C. C. Data Clustering
- D. D. Data Mining

*****Answer: A*****

60. Data transformation includes?

- A. A. Normalization
- B. B. Smoothing
- C. C. Aggregation
- D. D. All of the above

*****Answer: D*****

61. What is Data Preprocessing?

- A. A. Cleaning and transforming raw data
- B. B. Storing data in warehouses
- C. C. Performing OLAP operations
- D. D. Encrypting data

*****Answer: A*****

62. Data Quality includes?

- A. A. Accuracy
- B. B. Completeness

- C. C. Consistency
- D. D. All of the above

*****Answer: D*****

63. Which of the following is NOT a data preprocessing technique?

- A. A. Data Cleaning
- B. B. Data Reduction
- C. C. Data Migration
- D. D. Data Transformation

*****Answer: C*****

64. Handling missing values in data preprocessing is done by?

- A. A. Mean Substitution
- B. B. Data Reduction
- C. C. Data Clustering
- D. D. Data Mining

*****Answer: A*****

65. Data transformation includes?

- A. A. Normalization
- B. B. Smoothing
- C. C. Aggregation
- D. D. All of the above

*****Answer: D*****

66. What is Data Preprocessing?

- A. A. Cleaning and transforming raw data
- B. B. Storing data in warehouses
- C. C. Performing OLAP operations

D. D. Encrypting data

*****Answer: A*****

67. Data Quality includes?

A. A. Accuracy

B. B. Completeness

C. C. Consistency

D. D. All of the above

*****Answer: D*****

68. Which of the following is NOT a data preprocessing technique?

A. A. Data Cleaning

B. B. Data Reduction

C. C. Data Migration

D. D. Data Transformation

*****Answer: C*****

69. Handling missing values in data preprocessing is done by?

A. A. Mean Substitution

B. B. Data Reduction

C. C. Data Clustering

D. D. Data Mining

*****Answer: A*****

70. Data transformation includes?

A. A. Normalization

B. B. Smoothing

C. C. Aggregation

D. D. All of the above

*****Answer: D*****

71. What is Data Preprocessing?

- A. A. Cleaning and transforming raw data
- B. B. Storing data in warehouses
- C. C. Performing OLAP operations
- D. D. Encrypting data

*****Answer: A*****

72. Data Quality includes?

- A. A. Accuracy
- B. B. Completeness
- C. C. Consistency
- D. D. All of the above

*****Answer: D*****

73. Which of the following is NOT a data preprocessing technique?

- A. A. Data Cleaning
- B. B. Data Reduction
- C. C. Data Migration
- D. D. Data Transformation

*****Answer: C*****

74. Handling missing values in data preprocessing is done by?

- A. A. Mean Substitution
- B. B. Data Reduction
- C. C. Data Clustering
- D. D. Data Mining

*****Answer: A*****

75. Data transformation includes?

- A. A. Normalization
- B. B. Smoothing
- C. C. Aggregation
- D. D. All of the above

*****Answer: D*****

Topic 4: Association Analysis

76. What is Association Rule Mining?

- A. A. Identifying relationships among a set of items
- B. B. Performing OLAP operations
- C. C. Data Integration
- D. D. Extracting data

*****Answer: A*****

77. The Apriori Algorithm is used for?

- A. A. Clustering
- B. B. Classification
- C. C. Frequent Itemset Mining
- D. D. Data Preprocessing

*****Answer: C*****

78. A frequent itemset is?

- A. A. An itemset appearing frequently in a dataset
- B. B. A data warehouse model
- C. C. A method of OLAP
- D. D. A part of normalization

*****Answer: A*****

79. Which algorithm is more efficient than Apriori?

- A. A. FP-Tree
- B. B. Decision Tree
- C. C. Naive Bayes
- D. D. k-Means

*****Answer: A*****

80. Confidence in Association Rule Mining is defined as?

- A. A. Support / Total Transactions
- B. B. Conditional Probability of an itemset
- C. C. Total Items / Frequent Items
- D. D. None of the above

*****Answer: B*****

81. What is Association Rule Mining?

- A. A. Identifying relationships among a set of items
- B. B. Performing OLAP operations
- C. C. Data Integration
- D. D. Extracting data

*****Answer: A*****

82. The Apriori Algorithm is used for?

- A. A. Clustering
- B. B. Classification
- C. C. Frequent Itemset Mining
- D. D. Data Preprocessing

*****Answer: C*****

83. A frequent itemset is?

- A. A. An itemset appearing frequently in a dataset
- B. B. A data warehouse model
- C. C. A method of OLAP
- D. D. A part of normalization

*****Answer: A*****

84. Which algorithm is more efficient than Apriori?

- A. A. FP-Tree
- B. B. Decision Tree
- C. C. Naive Bayes
- D. D. k-Means

*****Answer: A*****

85. Confidence in Association Rule Mining is defined as?

- A. A. Support / Total Transactions
- B. B. Conditional Probability of an itemset
- C. C. Total Items / Frequent Items
- D. D. None of the above

*****Answer: B*****

86. What is Association Rule Mining?

- A. A. Identifying relationships among a set of items
- B. B. Performing OLAP operations
- C. C. Data Integration
- D. D. Extracting data

*****Answer: A*****

87. The Apriori Algorithm is used for?

- A. A. Clustering

- B. B. Classification
- C. C. Frequent Itemset Mining
- D. D. Data Preprocessing

*****Answer: C*****

88. A frequent itemset is?

- A. A. An itemset appearing frequently in a dataset
- B. B. A data warehouse model
- C. C. A method of OLAP
- D. D. A part of normalization

*****Answer: A*****

89. Which algorithm is more efficient than Apriori?

- A. A. FP-Tree
- B. B. Decision Tree
- C. C. Naive Bayes
- D. D. k-Means

*****Answer: A*****

90. Confidence in Association Rule Mining is defined as?

- A. A. Support / Total Transactions
- B. B. Conditional Probability of an itemset
- C. C. Total Items / Frequent Items
- D. D. None of the above

*****Answer: B*****

91. What is Association Rule Mining?

- A. A. Identifying relationships among a set of items
- B. B. Performing OLAP operations

C. C. Data Integration

D. D. Extracting data

*****Answer: A*****

92. The Apriori Algorithm is used for?

A. A. Clustering

B. B. Classification

C. C. Frequent Itemset Mining

D. D. Data Preprocessing

*****Answer: C*****

93. A frequent itemset is?

A. A. An itemset appearing frequently in a dataset

B. B. A data warehouse model

C. C. A method of OLAP

D. D. A part of normalization

*****Answer: A*****

94. Which algorithm is more efficient than Apriori?

A. A. FP-Tree

B. B. Decision Tree

C. C. Naive Bayes

D. D. k-Means

*****Answer: A*****

95. Confidence in Association Rule Mining is defined as?

A. A. Support / Total Transactions

B. B. Conditional Probability of an itemset

C. C. Total Items / Frequent Items

D. D. None of the above

*****Answer: B*****

96. What is Association Rule Mining?

A. A. Identifying relationships among a set of items

B. B. Performing OLAP operations

C. C. Data Integration

D. D. Extracting data

*****Answer: A*****

97. The Apriori Algorithm is used for?

A. A. Clustering

B. B. Classification

C. C. Frequent Itemset Mining

D. D. Data Preprocessing

*****Answer: C*****

98. A frequent itemset is?

A. A. An itemset appearing frequently in a dataset

B. B. A data warehouse model

C. C. A method of OLAP

D. D. A part of normalization

*****Answer: A*****

99. Which algorithm is more efficient than Apriori?

A. A. FP-Tree

B. B. Decision Tree

C. C. Naive Bayes

D. D. k-Means

*****Answer: A*****

100. Confidence in Association Rule Mining is defined as?

- A. A. Support / Total Transactions
- B. B. Conditional Probability of an itemset
- C. C. Total Items / Frequent Items
- D. D. None of the above

*****Answer: B*****

Fill in the Blanks

1. A Data Warehouse is a ____ repository of integrated data. *****(central)*****
2. OLAP stands for ____ Analytical Processing. *****(Online)*****
3. Data Mining is the process of discovering ____ patterns in data. *****(hidden)*****
4. Apriori algorithm is used for ____ mining. *****(association rule)*****
5. Data Preprocessing includes techniques like cleaning, ____, and transformation. *****(reduction)*****
6. A Data Warehouse is a ____ repository of integrated data. *****(central)*****
7. OLAP stands for ____ Analytical Processing. *****(Online)*****
8. Data Mining is the process of discovering ____ patterns in data. *****(hidden)*****
9. Apriori algorithm is used for ____ mining. *****(association rule)*****
10. Data Preprocessing includes techniques like cleaning, ____, and transformation. *****(reduction)*****
11. A Data Warehouse is a ____ repository of integrated data. *****(central)*****
12. OLAP stands for ____ Analytical Processing. *****(Online)*****
13. Data Mining is the process of discovering ____ patterns in data. *****(hidden)*****
14. Apriori algorithm is used for ____ mining. *****(association rule)*****
15. Data Preprocessing includes techniques like cleaning, ____, and transformation. *****(reduction)*****
16. A Data Warehouse is a ____ repository of integrated data. *****(central)*****

17. OLAP stands for ____ Analytical Processing. **Online**
18. Data Mining is the process of discovering ____ patterns in data. **hidden**
19. Apriori algorithm is used for ____ mining. **association rule**
20. Data Preprocessing includes techniques like cleaning, ____, and transformation. **reduction**
21. A Data Warehouse is a ____ repository of integrated data. **central**
22. OLAP stands for ____ Analytical Processing. **Online**
23. Data Mining is the process of discovering ____ patterns in data. **hidden**
24. Apriori algorithm is used for ____ mining. **association rule**
25. Data Preprocessing includes techniques like cleaning, ____, and transformation. **reduction**
26. A Data Warehouse is a ____ repository of integrated data. **central**
27. OLAP stands for ____ Analytical Processing. **Online**
28. Data Mining is the process of discovering ____ patterns in data. **hidden**
29. Apriori algorithm is used for ____ mining. **association rule**
30. Data Preprocessing includes techniques like cleaning, ____, and transformation. **reduction**
31. A Data Warehouse is a ____ repository of integrated data. **central**
32. OLAP stands for ____ Analytical Processing. **Online**
33. Data Mining is the process of discovering ____ patterns in data. **hidden**
34. Apriori algorithm is used for ____ mining. **association rule**
35. Data Preprocessing includes techniques like cleaning, ____, and transformation. **reduction**
36. A Data Warehouse is a ____ repository of integrated data. **central**
37. OLAP stands for ____ Analytical Processing. **Online**
38. Data Mining is the process of discovering ____ patterns in data. **hidden**
39. Apriori algorithm is used for ____ mining. **association rule**

40. Data Preprocessing includes techniques like cleaning, ____, and transformation.
(reduction)

41. A Data Warehouse is a ____ repository of integrated data. **(central)**

42. OLAP stands for ____ Analytical Processing. **(Online)**

43. Data Mining is the process of discovering ____ patterns in data. **(hidden)**

44. Apriori algorithm is used for ____ mining. **(association rule)**

45. Data Preprocessing includes techniques like cleaning, ____, and transformation.
(reduction)

46. A Data Warehouse is a ____ repository of integrated data. **(central)**

47. OLAP stands for ____ Analytical Processing. **(Online)**

48. Data Mining is the process of discovering ____ patterns in data. **(hidden)**

49. Apriori algorithm is used for ____ mining. **(association rule)**

50. Data Preprocessing includes techniques like cleaning, ____, and transformation.
(reduction)