Multiple Choice Questions.

1. _____ is a subject-oriented, integrated, time-variant, nonvolatile collection of data in support of
management decisions.
A. Data Mining.
B. Data Warehousing.
C. Web Mining.
D. Text Mining.
ANSWER: B

2. The data Warehouse is_____.
A. read only.
B. write only.
C. read write only.
D. none.
ANSWER: A

3. Expansion for DSS in DW is_____.
A. Decision Support system.
B. Decision Single System.
C. Data Storable System.
D. Data Support System.
ANSWER: A

4. The important aspect of the data warehouse environment is that data found within the data warehouse
is_____.
A. subject-oriented.
B. time-variant.
C. integrated.
D. All of the above.
ANSWER: D

5. The time horizon in Data warehouse is usually _____.
A. 1-2 years.
B. 3-4years.
C. 5-6 years.
D. 5-10 years.
ANSWER: D

6. The data is stored, retrieved & updated in _____.
A. OLAP.
B. OLTP.
C. SMTP.
D. FTP.
ANSWER: B

7. _____describes the data contained in the data warehouse.
A. Relational data.
B. Operational data.
C. Metadata.
D. Informational data.

ANSWER: C
8. _____predicts future trends & behaviors, allowing business managers to make proactive, knowledge-driven decisions.
A. Data warehouse.
B. Data mining.
C. Datamarts.
D. Metadata.
ANSWER: B
9. _____ is the heart of the warehouse.
A. Data mining database servers.
B. Data warehouse database servers.
C. Data mart database servers.
D. Relational data base servers.
ANSWER: B
10. _____ is the specialized data warehouse database.
A. Oracle.
B. DBZ.
C. Informix.
D. Redbrick.
ANSWER: D
11. _____defines the structure of the data held in operational databases and used by operational applications.
A. User-level metadata.
B. Data warehouse metadata.
C. Operational metadata.
D. Data mining metadata.
ANSWER: C
12. _____ is held in the catalog of the warehouse database system.
A. Application level metadata.
B. Algorithmic level metadata.
C. Departmental level metadata.
D. Core warehouse metadata.
ANSWER: B
13. _____maps the core warehouse metadata to business concepts, familiar and useful to end users.
A. Application level metadata.
B. User level metadata.
C. Enduser level metadata.
D. Core level metadata.
ANSWER: A
14. _____consists of formal definitions, such as a COBOL layout or a database schema.
A. Classical metadata.
B. Transformation metadata.
C. Historical metadata.
D. Structural metadata.
ANSWER: A

15. _____consists of information in the enterprise that is not in classical form.
A. Mushy metadata.
B. Differential metadata.
C. Data warehouse.
D. Data mining.
ANSWER: A
16. . _____databases are owned by particular departments or business groups.
A. Informational.
B. Operational.
C. Both informational and operational.
D. Flat.
ANSWER: B
17. The star schema is composed of _____ fact table.
A. one.
B. two.
C. three.
D. four.
ANSWER: A
18. The time horizon in operational environment is _____.
A. 30-60 days.
B. 60-90 days.
C. 90-120 days.
D. 120-150 days.
ANSWER: B
19. The key used in operational environment may not have an element of_____.
A. time.
B. cost.
C. frequency.
D. quality.
ANSWER: A
20. Data can be updated in _____environment.
A. data warehouse.
B. data mining.
C. operational.
D. informational.
ANSWER: C
21. Record cannot be updated in _____.
A. OLTP
B. files
C. RDBMS
D. data warehouse
ANSWER: D
22. The source of all data warehouse data is the_____.
A. operational environment.
B. informal environment.
C. formal environment.

D. technology environment.
ANSWER: A
23. Data warehouse contains_____data that is never found in the operational environment.
A. normalized.
B. informational.
C. summary.
D. denormalized.
ANSWER: C
24. The modern CASE tools belong to _____ category.
A. a. analysis.
B. b.Development
C. c.Coding
D. d.Delivery
ANSWER: A
25. Bill Inmon has estimated_____of the time required to build a data warehouse, is consumed in
the conversion process.
A. 10 percent.
B. 20 percent.
C. 40 percent
D. 80 percent.
ANSWER: D
26. Detail data in single fact table is otherwise known as_____.
A. monoatomic data.
B. diatomic data.
C. atomic data.
D. multiatomic data.
ANSWER: C
27. _____test is used in an online transactional processing environment.
A. MEGA.
B. MICRO.
C. MACRO.
D. ACID.
ANSWER: D
28. _____ is a good alternative to the star schema.
A. Star schema.
B. Snowflake schema.
C. Fact constellation.
D. Star-snowflake schema.
ANSWER: C
29. The biggest drawback of the level indicator in the classic star-schema is that it limits_____.
A. quantify.
B. qualify.
C. flexibility.
D. ability.

ANSWER: C
30. A data warehouse is _____.
A. updated by end users.
B. contains numerous naming conventions and formats
C. organized around important subject areas.
D. contains only current data.
ANSWER: C
31. An operational system is _____.
A. used to run the business in real time and is based on historical data.
B. used to run the business in real time and is based on current data.
C. used to support decision making and is based on current data.
D. used to support decision making and is based on historical data.
ANSWER: B
32. The generic two-level data warehouse architecture includes _____.
A. at least one data mart.
B. data that can extracted from numerous internal and external sources.
C. near real-time updates.
D. far real-time updates.
ANSWER: C
33. The active data warehouse architecture includes _____
A. at least one data mart.
B. data that can extracted from numerous internal and external sources.
C. near real-time updates.
D. all of the above.
ANSWER: D
34. Reconciled data is _____.
A. data stored in the various operational systems throughout the organization.
B. current data intended to be the single source for all decision support systems.
C. data stored in one operational system in the organization.
D. data that has been selected and formatted for end-user support applications.
ANSWER: B
35. Transient data is _____.
A. data in which changes to existing records cause the previous version of the records to be eliminated.
B. data in which changes to existing records do not cause the previous version of the records to be eliminated.
C. data that are never altered or deleted once they have been added.
D. data that are never deleted once they have been added.
ANSWER: A
36. The extract process is _____.
A. capturing all of the data contained in various operational systems.
B. capturing a subset of the data contained in various operational systems.
C. capturing all of the data contained in various decision support systems.
D. capturing a subset of the data contained in various decision support systems.
ANSWER: B
37. Data scrubbing is _____.

A. a process to reject data from the data warehouse and to create the necessary indexes.
B. a process to load the data in the data warehouse and to create the necessary indexes.
C. a process to upgrade the quality of data after it is moved into a data warehouse.
D. a process to upgrade the quality of data before it is moved into a data warehouse
ANSWER: D
38. The load and index is _____.
A. a process to reject data from the data warehouse and to create the necessary indexes.
B. a process to load the data in the data warehouse and to create the necessary indexes.
C. a process to upgrade the quality of data after it is moved into a data warehouse.
D. a process to upgrade the quality of data before it is moved into a data warehouse.
ANSWER: B
39. Data transformation includes _____.
A. a process to change data from a detailed level to a summary level.
B. a process to change data from a summary level to a detailed level.
C. joining data from one source into various sources of data.
D. separating data from one source into various sources of data.
ANSWER: A
40. _____ is called a multifield transformation.
A. Converting data from one field into multiple fields.
B. Converting data from fields into field.
C. Converting data from double fields into multiple fields.
D. Converting data from one field to one field.
ANSWER: A
41. The type of relationship in star schema is _____.
A. many-to-many.
B. one-to-one.
C. one-to-many.
D. many-to-one.
ANSWER: C
42. Fact tables are _____.
A. completely demoralized.
B. partially demoralized.
C. completely normalized.
D. partially normalized.
ANSWER: C
43. _____ is the goal of data mining.
A. To explain some observed event or condition.
B. To confirm that data exists.
C. To analyze data for expected relationships.
D. To create a new data warehouse.
ANSWER: A
44. Business Intelligence and data warehousing is used for _____.
A. Forecasting.
B. Data Mining.
C. Analysis of large volumes of product sales data.
D. All of the above.

ANSWER: D
45. The data administration subsystem helps you perform all of the following, except_____.
A. backups and recovery.
B. query optimization.
C. security management.
D. create, change, and delete information.
ANSWER: D
46. The most common source of change data in refreshing a data warehouse is _____.
A. queryable change data.
B. cooperative change data.
C. logged change data.
D. snapshot change data.
ANSWER: A
47. _____ are responsible for running queries and reports against data warehouse tables.
A. Hardware.
B. Software.
C. End users.
D. Middle ware.
ANSWER: C
48. Query tool is meant for _____.
A. data acquisition.
B. information delivery.
C. information exchange.
D. communication.
ANSWER: A
49. Classification rules are extracted from _____.
A. root node.
B. decision tree.
C. siblings.
D. branches.
ANSWER: B
50. Dimensionality reduction reduces the data set size by removing _____.
A. relevant attributes.
B. irrelevant attributes.
C. derived attributes.
D. composite attributes.
ANSWER: B
51. _____ is a method of incremental conceptual clustering.
A. CORBA.
B. OLAP.
C. COBWEB.
D. STING.
ANSWER: C
52. Effect of one attribute value on a given class is independent of values of other attribute is called _____.
A. value independence.

B. class conditional independence.
C. conditional independence.
D. unconditional independence.
ANSWER: A
53. The main organizational justification for implementing a data warehouse is to provide _____.
A. cheaper ways of handling transportation.
B. decision support.
C. storing large volume of data.
D. access to data.
ANSWER: C
54. Multidimensional database is otherwise known as_____.
A. RDBMS
B. DBMS
C. EXTENDED RDBMS
D. EXTENDED DBMS
ANSWER: B
55. Data warehouse architecture is based on _____.
A. DBMS.
B. RDBMS.
C. Sybase.
D. SQL Server.
ANSWER: B
56. Source data from the warehouse comes from _____.
A. ODS.
B. TDS.
C. MDDB.
D. ORDBMS.
ANSWER: A
57. _____ is a data transformation process.
A. Comparison.
B. Projection.
C. Selection.
D. Filtering.
ANSWER: D
58. The technology area associated with CRM is _____.
A. specialization.
B. generalization.
C. personalization.
D. summarization.
ANSWER: C
59. SMP stands for _____.
A. Symmetric Multiprocessor.
B. Symmetric Multiprogramming.
C. Symmetric Metaprogramming.
D. Symmetric Microprogramming.
ANSWER: A

60. _____ are designed to overcome any limitations placed on the warehouse by the nature of the
relational data model.
A. Operational database.
B. Relational database.
C. Multidimensional database.
D. Data repository.
ANSWER: C
61. _____ are designed to overcome any limitations placed on the warehouse by the nature of the
relational data model.
A. Operational database.
B. Relational database.
C. Multidimensional database.
D. Data repository.
ANSWER: C
62. MDDB stands for _____.
A. multiple data doubling.
B. multidimensional databases.
C. multiple double dimension.
D. multi-dimension doubling.
ANSWER: B
63. _____ is data about data.
A. Metadata.
B. Microdata.
C. Minidata.
D. Multidata.
ANSWER: A
64. _____ is an important functional component of the metadata.
A. Digital directory.
B. Repository.
C. Information directory.
D. Data dictionary.
ANSWER: C
65. EIS stands for _____.
A. Extended interface system.
B. Executive interface system.
C. Executive information system.
D. Extendable information system.
ANSWER: C
66. _____ is data collected from natural systems.
A. MRI scan.
B. ODS data.
C. Statistical data.
D. Historical data.
ANSWER: A

67. _____ is an example of application development environments.
A. Visual Basic.
B. Oracle.
C. Sybase.
D. SQL Server.
ANSWER: A
68. The term that is not associated with data cleaning process is _____.
A. domain consistency.
B. deduplication.
C. disambiguation.
D. segmentation.
ANSWER: D
69. _____ are some popular OLAP tools.
A. Metacube, Informix.
B. Oracle Express, Essbase.
C. HOLAP.
D. MOLAP.
ANSWER: A
70. Capability of data mining is to build _____ models.
A. retrospective.
B. interrogative.
C. predictive.
D. imperative.
ANSWER: C
71. _____ is a process of determining the preference of customer's majority.
A. Association.
B. Preferencing.
C. Segmentation.
D. Classification.
ANSWER: B
72. Strategic value of data mining is _____.
A. cost-sensitive.
B. work-sensitive.
C. time-sensitive.
D. technical-sensitive.
ANSWER: C
73. _____ proposed the approach for data integration issues.
A. Ralph Campbell.
B. Ralph Kimball.
C. John Raphlin.
D. James Gosling.
ANSWER: B
74. The terms equality and roll up are associated with _____.
A. OLAP.
B. visualization.
C. data mart.

D. decision tree.
ANSWER: C
75. Exceptional reporting in data warehousing is otherwise called as _____.
A. exception.
B. alerts.
C. errors.
D. bugs.
ANSWER: B
76. _____ is a metadata repository.
A. Prism solution directory manager.
B. CORBA.
C. STUNT.
D. COBWEB.
ANSWER: A
77. _____ is an expensive process in building an expert system.
A. Analysis.
B. Study.
C. Design.
D. Information collection.
ANSWER: D
78. The full form of KDD is _____.
A. Knowledge database.
B. Knowledge discovery in database.
C. Knowledge data house.
D. Knowledge data definition.
ANSWER: B
79. The first International conference on KDD was held in the year _____.
A. 1996.
B. 1997.
C. 1995.
D. 1994.
ANSWER: C
80. Removing duplicate records is a process called _____.
A. recovery.
B. data cleaning.
C. data cleansing.
D. data pruning.
ANSWER: B
81. _____ contains information that gives users an easy-to-understand perspective of the information stored in the data warehouse.
A. Business metadata.
B. Technical metadata.
C. Operational metadata.
D. Financial metadata.
ANSWER: A

82. _____ helps to integrate, maintain and view the contents of the data warehousing system.
A. Business directory.
B. Information directory.
C. Data dictionary.
D. Database.
ANSWER: B
83. Discovery of cross-sales opportunities is called _____.
A. segmentation.
B. visualization.
C. correction.
D. association.
ANSWER: D
84. Data marts that incorporate data mining tools to extract sets of data are called _____.
A. independent data mart.
B. dependent data marts.
C. intra-entry data mart.
D. inter-entry data mart.
ANSWER: B
85. _____ can generate programs itself, enabling it to carry out new tasks.
A. Automated system.
B. Decision making system.
C. Self-learning system.
D. Productivity system.
ANSWER: D
86. The power of self-learning system lies in _____.
A. cost.
B. speed.
C. accuracy.
D. simplicity.
ANSWER: C
87. Building the informational database is done with the help of _____.
A. transformation or propagation tools.
B. transformation tools only.
C. propagation tools only.
D. extraction tools.
ANSWER: A
88. How many components are there in a data warehouse?
A. two.
B. three.
C. four.
D. five.
ANSWER: D
89. Which of the following is not a component of a data warehouse?
A. Metadata.
B. Current detail data.

C. Lightly summarized data.
D. Component Key.
ANSWER: D
90. _____ is data that is distilled from the low level of detail found at the current detailed leve.
A. Highly summarized data.
B. Lightly summarized data.
C. Metadata.
D. Older detail data.
ANSWER: B
91. Highly summarized data is _____.
A. compact and easily accessible.
B. compact and expensive.
C. compact and hardly accessible.
D. compact.
ANSWER: A
92. A directory to help the DSS analyst locate the contents of the data warehouse is seen in _____.
A. Current detail data.
B. Lightly summarized data.
C. Metadata.
D. Older detail data.
ANSWER: C
93. Metadata contains atleast _____.
A. the structure of the data.
B. the algorithms used for summarization.
C. the mapping from the operational environment to the data warehouse.
D. all of the above.
ANSWER: D
94. Which of the following is not a old detail storage medium?
A. Phot Optical Storage.
B. RAID.
C. Microfinche.
D. Pen drive.
ANSWER: D
95. The data from the operational environment enter _____ of data warehouse.
A. Current detail data.
B. Older detail data.
C. Lightly summarized data.
D. Highly summarized data.
ANSWER: A
96. The data in current detail level resides till _____ event occurs.
A. purge.
B. summarization.
C. archieved.
D. all of the above.
ANSWER: D
97. The dimension tables describe the _____.

A. entities.
B. facts.
C. keys.
D. units of measures.
ANSWER: B
98. The granularity of the fact is the _____ of detail at which it is recorded.
A. transformation.
B. summarization.
C. level.
D. transformation and summarization.
ANSWER: C
99. Which of the following is not a primary grain in analytical modeling?
A. Transaction.
B. Periodic snapshot.
C. Accumulating snapshot.
D. All of the above.
ANSWER: B
100. Granularity is determined by _____.
A. number of parts to a key.
B. granularity of those parts.
C. both A and B.
D. none of the above.
ANSWER: C
101. _____ of data means that the attributes within a given entity are fully dependent on the entire
primary key of the entity.
A. Additivity.
B. Granularity.
C. Functional dependency.
D. Dimensionality.
ANSWER: C
102. A fact is said to be fully additive if _____.
A. it is additive over every dimension of its dimensionality.
B. additive over atleast one but not all of the dimensions.
C. not additive over any dimension.
D. None of the above.
ANSWER: A
103. A fact is said to be partially additive if _____.
A. it is additive over every dimension of its dimensionality.
B. additive over atleast one but not all of the dimensions.
C. not additive over any dimension.
D. None of the above.
ANSWER: B
104. A fact is said to be non-additive if _____.
A. it is additive over every dimension of its dimensionality.
B. additive over atleast one but not all of the dimensions.

C. not additive over any dimension.
D. None of the above.
ANSWER: C
105. Non-additive measures can often combined with additive measures to create new _____.
A. additive measures.
B. non-additive measures.
C. partially additive.
D. All of the above.
ANSWER: A
106. A fact representing cumulative sales units over a day at a store for a product is a _____.
A. additive fact.
B. fully additive fact.
C. partially additive fact.
D. non-additive fact.
ANSWER: B
107. _____ of data means that the attributes within a given entity are fully dependent on the entire
primary key of the entity.
A. Additivity.
B. Granularity.
C. Functional Dependency.
D. Dependency.
ANSWER: C
108. Which of the following is the other name of Data mining?
A. Exploratory data analysis.
B. Data driven discovery.
C. Deductive learning.
D. All of the above.
ANSWER: D
109. Which of the following is a predictive model?
A. Clustering.
B. Regression.
C. Summarization.
D. Association rules.
ANSWER: B
110. Which of the following is a descriptive model?
A. Classification.
B. Regression.
C. Sequence discovery.
D. Association rules.
ANSWER: C
111. A _____ model identifies patterns or relationships.
A. Descriptive.
B. Predictive.
C. Regression.
D. Time series analysis.

ANSWER: A
112. A predictive model makes use of _____.
A. current data.
B. historical data.
C. both current and historical data.
D. assumptions.
ANSWER: B
113. _____ maps data into predefined groups.
A. Regression.
B. Time series analysis
C. Prediction.
D. Classification.
ANSWER: D
114. _____ is used to map a data item to a real valued prediction variable.
A. Regression.
B. Time series analysis.
C. Prediction.
D. Classification.
ANSWER: B
115. In _____, the value of an attribute is examined as it varies over time.
A. Regression.
B. Time series analysis.
C. Sequence discovery.
D. Prediction.
ANSWER: B
116. In _____ the groups are not predefined.
A. Association rules.
B. Summarization.
C. Clustering.
D. Prediction.
ANSWER: C
117. Link Analysis is otherwise called as _____.
A. affinity analysis.
B. association rules.
C. both A & B.
D. Prediction.
ANSWER: C
118. _____ is a the input to KDD.
A. Data.
B. Information.
C. Query.
D. Process.
ANSWER: A
119. The output of KDD is _____.
A. Data.
B. Information.

C. Query.
D. Useful information.
ANSWER: D
120. The KDD process consists of _____ steps.
A. three.
B. four.
C. five.
D. six.
ANSWER: C
121. Treating incorrect or missing data is called as _____.
A. selection.
B. preprocessing.
C. transformation.
D. interpretation.
ANSWER: B
122. Converting data from different sources into a common format for processing is called as _____.
A. selection.
B. preprocessing.
C. transformation.
D. interpretation.
ANSWER: C
123. Various visualization techniques are used in _____ step of KDD.
A. selection.
B. transformaion.
C. data mining.
D. interpretation.
ANSWER: D
124. Extreme values that occur infrequently are called as _____.
A. outliers.
B. rare values.
C. dimensionality reduction.
D. All of the above.
ANSWER: A
125. Box plot and scatter diagram techniques are _____.
A. Graphical.
B. Geometric.
C. Icon-based.
D. Pixel-based.
ANSWER: B
126. _____ is used to proceed from very specific knowledge to more general information.
A. Induction.
B. Compression.
C. Approximation.
D. Substitution.
ANSWER: A

127. Describing some characteristics of a set of data by a general model is viewed as _____
A. Induction.
B. Compression.
C. Approximation.
D. Summarization.
ANSWER: B
128. _____ helps to uncover hidden information about the data.
A. Induction.
B. Compression.
C. Approximation.
D. Summarization.
ANSWER: C
129. _____ are needed to identify training data and desired results.
A. Programmers.
B. Designers.
C. Users.
D. Administrators.
ANSWER: C
130. Overfitting occurs when a model _____.
A. does fit in future states.
B. does not fit in future states.
C. does fit in current state.
D. does not fit in current state.
ANSWER: B
131. The problem of dimensionality curse involves _____.
A. the use of some attributes may interfere with the correct completion of a data mining task.
B. the use of some attributes may simply increase the overall complexity.
C. some may decrease the efficiency of the algorithm.
D. All of the above.
ANSWER: D
132. Incorrect or invalid data is known as _____.
A. changing data.
B. noisy data.
C. outliers.
D. missing data.
ANSWER: B
133. ROI is an acronym of _____.
A. Return on Investment.
B. Return on Information.
C. Repetition of Information.
D. Runtime of Instruction
ANSWER: A
134. The _____ of data could result in the disclosure of information that is deemed to be confidential.
A. authorized use.

B. unauthorized use.
C. authenticated use.
D. unauthenticated use.
ANSWER: B
135. _____ data are noisy and have many missing attribute values.
A. Preprocessed.
B. Cleaned.
C. Real-world.
D. Transformed.
ANSWER: C
136. The rise of DBMS occurred in early _____.
A. 1950's.
B. 1960's
C. 1970's
D. 1980's.
ANSWER: C
137. SQL stand for _____.
A. Standard Query Language.
B. Structured Query Language.
C. Standard Quick List.
D. Structured Query list.
ANSWER: B
138. Which of the following is not a data mining metric?
A. Space complexity.
B. Time complexity.
C. ROI.
D. All of the above.
ANSWER: D
139. Reducing the number of attributes to solve the high dimensionality problem is called as _____.
A. dimensionality curse.
B. dimensionality reduction.
C. cleaning.
D. Overfitting.
ANSWER: B
140. Data that are not of interest to the data mining task is called as _____.
A. missing data.
B. changing data.
C. irrelevant data.
D. noisy data.
ANSWER: C
141. _____ are effective tools to attack the scalability problem.
A. Sampling.
B. Parallelization
C. Both A & B.
D. None of the above.

ANSWER: C
142. Market-basket problem was formulated by _____.
A. Agrawal et al.
B. Steve et al.
C. Toda et al.
D. Simon et al.
ANSWER: A
143. Data mining helps in _____.
A. inventory management.
B. sales promotion strategies.
C. marketing strategies.
D. All of the above.
ANSWER: D
144. The proportion of transaction supporting X in T is called _____.
A. confidence.
B. support.
C. support count.
D. All of the above.
ANSWER: B
145. The absolute number of transactions supporting X in T is called _____.
A. confidence.
B. support.
C. support count.
D. None of the above.
ANSWER: C
146. The value that says that transactions in D that support X also support Y is called _____.
A. confidence.
B. support.
C. support count.
D. None of the above.
ANSWER: A
147. If T consist of 500000 transactions, 20000 transaction contain bread, 30000 transaction contain jam,
10000 transaction contain both bread and jam. Then the support of bread and jam is _____.
A. 2%
B. 20%
C. 3%
D. 30%
ANSWER: A
148. 7 If T consist of 500000 transactions, 20000 transaction contain bread, 30000 transaction contain jam,
10000 transaction contain both bread and jam. Then the confidence of buying bread with jam is _____.
A. 33.33%
B. 66.66%

C. 45%
D. 50%
ANSWER: D
149. The left hand side of an association rule is called _____.
A. consequent.
B. onset.
C. antecedent.
D. precedent.
ANSWER: C
150. The right hand side of an association rule is called _____.
A. consequent.
B. onset.
C. antecedent.
D. precedent.
ANSWER: A
151. Which of the following is not a desirable feature of any efficient algorithm?
A. to reduce number of input operations.
B. to reduce number of output operations.
C. to be efficient in computing.
D. to have maximal code length.
ANSWER: D
152. All set of items whose support is greater than the user-specified minimum support are called as _____.
A. border set.
B. frequent set.
C. maximal frequent set.
D. lattice.
ANSWER: B
153. If a set is a frequent set and no superset of this set is a frequent set, then it is called _____.
A. maximal frequent set.
B. border set.
C. lattice.
D. infrequent sets.
ANSWER: A
154. Any subset of a frequent set is a frequent set. This is _____.
A. Upward closure property.
B. Downward closure property.
C. Maximal frequent set.
D. Border set.
ANSWER: B
155. Any superset of an infrequent set is an infrequent set. This is _____.
A. Maximal frequent set.
B. Border set.
C. Upward closure property.
D. Downward closure property.
ANSWER: C

156. If an itemset is not a frequent set and no superset of this is a frequent set, then it is _____.
A. Maximal frequent set
B. Border set.
C. Upward closure property.
D. Downward closure property.
ANSWER: B
157. A priori algorithm is otherwise called as _____.
A. width-wise algorithm.
B. level-wise algorithm.
C. pincer-search algorithm.
D. FP growth algorithm.
ANSWER: B
158. The A Priori algorithm is a _____.
A. top-down search.
B. breadth first search.
C. depth first search.
D. bottom-up search.
ANSWER: D
159. The first phase of A Priori algorithm is _____.
A. Candidate generation.
B. Itemset generation.
C. Pruning.
D. Partitioning.
ANSWER: A
160. The second phaase of A Priori algorithm is _____.
A. Candidate generation.
B. Itemset generation.
C. Pruning.
D. Partitioning.
ANSWER: C
161. The _____ step eliminates the extensions of (k-1)-itemsets which are not found to be frequent, from
being considered for counting support.
A. Candidate generation.
B. Pruning.
C. Partitioning.
D. Itemset eliminations.
ANSWER: B
162. The a priori frequent itemset discovery algorithm moves _____ in the lattice.
A. upward.
B. downward.
C. breadthwise.
D. both upward and downward.
ANSWER: A
163. After the pruning of a priori algorithm, _____ will remain.
A. Only candidate set.

B. No candidate set.
C. Only border set.
D. No border set.
ANSWER: B
164. The number of iterations in a priori _____.
A. increases with the size of the maximum frequent set.
B. decreases with increase in size of the maximum frequent set.
C. increases with the size of the data.
D. decreases with the increase in size of the data.
ANSWER: A
165. MFCS is the acronym of _____.
A. Maximum Frequency Control Set.
B. Minimal Frequency Control Set.
C. Maximal Frequent Candidate Set.
D. Minimal Frequent Candidate Set.
ANSWER: C
166. Dynamuc Itemset Counting Algorithm was proposed by ____.
A. Bin et al.
B. Argawal et at.
C. Toda et al.
D. Simon et at.
ANSWER: A
167. Itemsets in the _____ category of structures have a counter and the stop number with them.
A. Dashed.
B. Circle.
C. Box.
D. Solid.
ANSWER: A
168. The itemsets in the _____category structures are not subjected to any counting.
A. Dashes.
B. Box.
C. Solid.
D. Circle.
ANSWER: C
169. Certain itemsets in the dashed circle whose support count reach support value during an iteration
move into the _____.
A. Dashed box.
B. Solid circle.
C. Solid box.
D. None of the above.
ANSWER: A
170. Certain itemsets enter afresh into the system and get into the _____, which are essentially the
supersets of the itemsets that move from the dashed circle to the dashed box.
A. Dashed box.

B. Solid circle.
C. Solid box.
D. Dashed circle.
ANSWER: D
171. The itemsets that have completed on full pass move from dashed circle to _____.
A. Dashed box.
B. Solid circle.
C. Solid box.
D. None of the above.
ANSWER: B
172. The FP-growth algorithm has _____ phases.
A. one.
B. two.
C. three.
D. four.
ANSWER: B
173. A frequent pattern tree is a tree structure consisting of _____.
A. an item-prefix-tree.
B. a frequent-item-header table.
C. a frequent-item-node.
D. both A & B.
ANSWER: D
174. The non-root node of item-prefix-tree consists of _____ fields.
A. two.
B. three.
C. four.
D. five.
ANSWER: B
175. The frequent-item-header-table consists of _____ fields.
A. only one.
B. two.
C. three.
D. four.
ANSWER: B
176. The paths from root node to the nodes labelled 'a' are called _____.
A. transformed prefix path.
B. suffix subpath.
C. transformed suffix path.
D. prefix subpath.
ANSWER: D
177. The transformed prefix paths of a node 'a' form a truncated database of pattern which co-occur with a
is called _____.
A. suffix path.
B. FP-tree.
C. conditional pattern base.

D. prefix path.
ANSWER: C
178. The goal of _____ is to discover both the dense and sparse regions of a data set.
A. Association rule.
B. Classification.
C. Clustering.
D. Genetic Algorithm.
ANSWER: C
179. Which of the following is a clustering algorithm?
A. A priori.
B. CLARA.
C. Pincer-Search.
D. FP-growth.
ANSWER: B
180. _____ clustering technique start with as many clusters as there are records, with each cluster having
only one record.
A. Agglomerative.
B. divisive.
C. Partition.
D. Numeric.
ANSWER: A
181. _____ clustering techniques starts with all records in one cluster and then try to split that cluster
into small pieces.
A. Agglomerative.
B. Divisive.
C. Partition.
D. Numeric.
ANSWER: B
182. Which of the following is a data set in the popular UCI machine-learning repository?
A. CLARA.
B. CACTUS.
C. STIRR.
D. MUSHROOM.
ANSWER: D
183. In _____ algorithm each cluster is represented by the center of gravity of the cluster.
A. k-medoid.
B. k-means.
C. STIRR.
D. ROCK.
ANSWER: B
184. In _____ each cluster is represented by one of the objects of the cluster located near the
center.
A. k-medoid.

B. k-means.
C. STIRR.
D. ROCK.
ANSWER: A
185. Pick out a k-medoid algoithm.
A. DBSCAN.
B. BIRCH.
C. PAM.
D. CURE.
ANSWER: C
186. Pick out a hierarchical clustering algorithm.
A. DBSCAN
B. BIRCH.
C. PAM.
D. CURE.
ANSWER: A
187. CLARANS stands for _____.
A. CLARA Net Server.
B. Clustering Large Application RAnge Network Search.
C. Clustering Large Applications based on RANdomized Search.
D. CLustering Application Randomized Search.
ANSWER: C
188. BIRCH is a _____.
A. agglomerative clustering algorithm.
B. hierarchical algorithm.
C. hierarchical-agglomerative algorithm.
D. divisive.
ANSWER: C
189. The cluster features of different subclusters are maintained in a tree called _____.
A. CF tree.
B. FP tree.
C. FP growth tree.
D. B tree.
ANSWER: A
190. The _____ algorithm is based on the observation that the frequent sets are normally very few in
number compared to the set of all itemsets.
A. A priori.
B. Clustering.
C. Association rule.
D. Partition.
ANSWER: D
191. The partition algorithm uses _____ scans of the databases to discover all frequent sets.
A. two.
B. four.
C. six.

D. eight.
ANSWER: A
192. The basic idea of the apriori algorithm is to generate_____ item sets of a particular size & scans
the database.
A. candidate.
B. primary.
C. secondary.
D. superkey.
ANSWER: A
193. _____is the most well known association rule algorithm and is used in most commercial products.
A. Apriori algorithm.
B. Partition algorithm.
C. Distributed algorithm.
D. Pincer-search algorithm.
ANSWER: A
194. An algorithm called_____is used to generate the candidate item sets for each pass after the first.
A. apriori.
B. apriori-gen.
C. sampling.
D. partition.
ANSWER: B
195. The basic partition algorithm reduces the number of database scans to _____ & divides it into
partitions.
A. one.
B. two.
C. three.
D. four.
ANSWER: B
196. _____and prediction may be viewed as types of classification.
A. Decision.
B. Verification.
C. Estimation.
D. Illustration.
ANSWER: C
197. _____can be thought of as classifying an attribute value into one of a set of possible classes.
A. Estimation.
B. Prediction.
C. Identification.
D. Clarification.
ANSWER: B
198. Prediction can be viewed as forecasting a_____value.

A. non-continuous.
B. constant.
C. continuous.
D. variable.
ANSWER: C
199. _____data consists of sample input data as well as the classification assignment for the data.
A. Missing.
B. Measuring.
C. Non-training.
D. Training.
ANSWER: D
200. Rule based classification algorithms generate _____ rule to perform the classification.
A. if-then.
B. while.
C. do while.
D. switch.
ANSWER: A
201. _____ are a different paradigm for computing which draws its inspiration from neuroscience.
A. Computer networks.
B. Neural networks.
C. Mobile networks.
D. Artificial networks.
ANSWER: B
202. The human brain consists of a network of _____.
A. neurons.
B. cells.
C. Tissue.
D. muscles.
ANSWER: A
203. Each neuron is made up of a number of nerve fibres called _____.
A. electrons.
B. molecules.
C. atoms.
D. dendrites.
ANSWER: D
204. The _____is a long, single fibre that originates from the cell body.
A. axon.
B. neuron.
C. dendrites.
D. strands.
ANSWER: A
205. A single axon makes _____ of synapses with other neurons.
A. ones.
B. hundreds.

C. thousands.
D. millions.
ANSWER: C
206. _____ is a complex chemical process in neural networks.
A. Receiving process.
B. Sending process.
C. Transmission process.
D. Switching process.
ANSWER: C
207. _____ is the connectivity of the neuron that give simple devices their real power. a. b. c. d.
A. Water.
B. Air.
C. Power.
D. Fire.
ANSWER: D
208. _____ are highly simplified models of biological neurons.
A. Artificial neurons.
B. Computational neurons.
C. Biological neurons.
D. Technological neurons.
ANSWER: A
209. The biological neuron's _____ is a continuous function rather than a step function.
A. read.
B. write.
C. output.
D. input.
ANSWER: C
210. The threshold function is replaced by continuous functions called _____ functions.
A. activation.
B. deactivation.
C. dynamic.
D. standard.
ANSWER: A
211. The sigmoid function also knows as _____functions.
A. regression.
B. logistic.
C. probability.
D. neural.
ANSWER: B
212. MLP stands for _____.
A. mono layer perception.
B. many layer perception.
C. more layer perception.
D. multi layer perception.
ANSWER: D

213. In a feed- forward networks, the conncetions between layers are _____ from input to output.
A. bidirectional.
B. unidirectional.
C. multidirectional.
D. directional.
ANSWER: B
214. The network topology is constrained to be _____.
A. feedforward.
B. feedbackward.
C. feed free.
D. feed busy.
ANSWER: A
215. RBF stands for _____.
A. Radial basis function.
B. Radial bio function.
C. Radial big function.
D. Radial bi function.
ANSWER: A
216. RBF have only _____ hidden layer.
A. four.
B. three.
C. two.
D. one.
ANSWER: D
217. RBF hidden layer units have a receptive field which has a _____; that is, a particular input
value at which they have a maximal output.
A. top.
B. bottom.
C. centre.
D. border.
ANSWER: C
218. _____ training may be used when a clear link between input data sets and target output values
does not exist.
A. Competitive.
B. Perception.
C. Supervised.
D. Unsupervised.
ANSWER: D
219. _____ employs the supervised mode of learning.
A. RBF.
B. MLP.
C. MLP & RBF.
D. ANN.

ANSWER: C
220. _____ design involves deciding on their centres and the sharpness of their Gaussians.
A. DR.
B. AND.
C. XOR.
D. RBF.
ANSWER: D
221. _____ is the most widely applied neural network technique.
A. ABC.
B. PLM.
C. LMP.
D. MLP.
ANSWER: D
222. SOM is an acronym of _____.
A. self-organizing map.
B. self origin map.
C. single organizing map.
D. simple origin map.
ANSWER: A
223. _____ is one of the most popular models in the unsupervised framework.
A. SOM.
B. SAM.
C. OSM.
D. MSO.
ANSWER: A
224. The actual amount of reduction at each learning step may be guided by _____.
A. learning cost.
B. learning level.
C. learning rate.
D. learning time.
ANSWER: C
225. The SOM was a neural network model developed by _____.
A. Simon King.
B. Teuvokohonen.
C. Tomoki Toda.
D. Julia.
ANSWER: B
226. SOM was developed during _____.
A. 1970-80.
B. 1980-90.
C. 1990 -60.
D. 1979 -82.
ANSWER: D
227. Investment analysis used in neural networks is to predict the movement of _____ from previous

data.
A. engines.
B. stock.
C. patterns.
D. models.
ANSWER: B
228. SOMs are used to cluster a specific _____ dataset containing information about the patient's
drugs etc.
A. physical.
B. logical.
C. medical.
D. technical.
ANSWER: C
229. GA stands for _____.
A. Genetic algorithm
B. Gene algorithm.
C. General algorithm.
D. Geo algorithm.
ANSWER: A
230. GA was introduced in the year _____.
A. 1955.
B. 1965.
C. 1975.
D. 1985.
ANSWER: C
231. Genetic algorithms are search algorithms based on the mechanics of natural_____.
A. systems.
B. genetics.
C. logistics.
D. statistics.
ANSWER: B
232. GAs were developed in the early _____.
A. 1970.
B. 1960.
C. 1950.
D. 1940.
ANSWER: A
233. The RSES system was developed in _____.
A. Poland.
B. Italy.
C. England.
D. America.
ANSWER: A
234. Crossover is used to _____.
A. recombine the population's genetic material.

B. introduce new genetic structures in the population.
C. to modify the population's genetic material.
D. All of the above.
ANSWER: A
235. The mutation operator _____.
A. recombine the population's genetic material.
B. introduce new genetic structures in the population.
C. to modify the population's genetic material.
D. All of the above.
ANSWER: B
236. Which of the following is an operation in genetic algorithm?
A. Inversion.
B. Dominance.
C. Genetic edge recombination.
D. All of the above.
ANSWER: D
237. . _____ is a system created for rule induction.
A. RBS.
B. CBS.
C. DBS.
D. LERS.
ANSWER: D
238. NLP stands for _____.
A. Non Language Process.
B. Nature Level Program.
C. Natural Language Page.
D. Natural Language Processing.
ANSWER: D
239. Web content mining describes the discovery of useful information from the _____contents.
A. text.
B. web.
C. page.
D. level.
ANSWER: B
240. Research on mining multi-types of data is termed as _____ data.
A. graphics.
B. multimedia.
C. meta.
D. digital.
ANSWER: B
241. _____ mining is concerned with discovering the model underlying the link structures of the web.
A. Data structure.
B. Web structure.
C. Text structure.
D. Image structure.

ANSWER: B
242. _____ is the way of studying the web link structure.
A. Computer network.
B. Physical network.
C. Social network.
D. Logical network.
ANSWER: C
243. The _____ propose a measure of standing a node based on path counting.
A. open web.
B. close web.
C. link web.
D. hidden web.
ANSWER: B
244. In web mining, _____ is used to find natural groupings of users, pages, etc.
A. clustering.
B. associations.
C. sequential analysis.
D. classification.
ANSWER: A
245. In web mining, _____ is used to know the order in which URLs tend to be accessed.
A. clustering.
B. associations.
C. sequential analysis.
D. classification.
ANSWER: C
246. In web mining, _____ is used to know which URLs tend to be requested together.
A. clustering.
B. associations.
C. sequential analysis.
D. classification.
ANSWER: B
247. _____ describes the discovery of useful information from the web contents.
A. Web content mining.
B. Web structure mining.
C. Web usage mining.
D. All of the above.
ANSWER: A
248. _____ is concerned with discovering the model underlying the link structures of the web.
A. Web content mining.
B. Web structure mining.
C. Web usage mining.
D. All of the above.
ANSWER: B
249. The _____ engine for a data warehouse supports query-triggered usage of data
A. NNTP
B. SMTP

C. OLAP
D. POP
ANSWER: C
250. _____ displays of data such as maps, charts and other graphical representation allow data to be
presented compactly to the users.
A. Hidden
B. Visual
C. Obscured
D. Concealed
ANSWER: B