107. Which of the following operations are considered as fundamental in relational algebra?

A. Select and Project
B. Project and Cartesian product
C. Union and Set Difference
D. All of the above

ANSWER SHEET

1.B	2.A	3.C	4.B	5.B	6.A	7.C	8.A	9.C	10.D
11.A	12.A	13.D	14.A	15.C	16.B	17.B	18.B	19.D	20.A
21.A	22.A	23.C	24.D	25.D	26.B	27.C	28.A	29.C	30.A
31.D	32.A	33.B	34.C	35.A	36.B	37.C	38.A	39.B	40.C
41.D	42.A	43.A	44.A	45.A	46.A	47.A	48.A	49.B	50.A
51.A	52.A	53.D	54.B	55.B	56.A	57.A	58.A	59.B	60.B
61.A	62.B	63.A	64.A	65.A	66.A	67.A	68.A	69.C	70.A
71.A	72.A	73.D	74.A	75.A	76.A	77.A	78.A	79.A	80.A
81.A	82.A	83.A	84.A	85.A	86.A	87.A	88.A	89.B	90.C
91.A	92.B	93.C	94.A	95.A	96.B	97.C	98.B	99.C	100.B
101.A	102.A	103.B	104.D	105.A	106.D	107.D			

MULTIPLE CHOICE QUESTIONS

Database Management System (SET-2)

1. **The first generation of DBMS is represented by systems:**
A. Hierarchical and CODASYL systems
B. Relational model
C. Network model
D. None of the above

2. **Data is:**
A. Raw fact and figure
B. Information only
C. Metadata
D. None of the above

3. **An important deliverables of the data integration process is.....**
A. Information
B. Design plan
C. Metadata
D. None of the above

4. **Which of the following is correct?**
A. Data +DBMS = databases
B. Data + Database = DBMS
C. Database + DBMS = database system
D. None of the above

5. **A general mode for data use is:**
A. Queries
B. Both A. and C.
C. Transactions
D. None of the above

6. **A repository of information about a database is known as a**
A. Data dictionary
B. Database authority
C. Distributed administration
D. None of the above

7. **DBA stands for:**
A. Database access
B. Database Authority
C. Database administration
D. None of the above

8. **The overall description of the database is known as:**
A. Instance
B. Snapshot
C. Schema
D. None of the above

9. **How many schemas will be there per level, per database?**
A. One B. Three
C. Two D. Four

10. **Schema is same as an:**
A. Extension of the database
B. Subschema
C. Intension of the database
D. None of the above

11. **ANSI-SPARC model consist of.....**
A. 2-layered model
B. 4-layered model
C. 3-layered model
D. None of the above

12. **Anything which exists and is distinguishable one another is known as.....**
A. Entity
B. Relationship
C. Attribute
D. None of the above

13. **The physical storage structure or devices could be changed without affecting the conceptual schemA. This is known as.....**
A. Physical data independence
B. External data independence
C. Logical data independence
D. None of the above

14. **DDL stands for**
A. Data domain language
B. Data definition language
C. Data definition law
D. None of the above

15. **Create, Alter and Drop are the examples of...**
A. DDL B. VDL
C. DML D. SDL

16. **PL\SQL is A.....**
A. Non-procedural DML
B. Formal Query Language
C. Procedural DML
D. None of the above

17. **SQL, QBE, QUEL are the examples of.....**
A. Formal Query Language
B. DDL
C. Commercial query language
D. None of the above

18. **Which of the following is true for a Data Sub Language (DSL)?**
A. DSL =DDL + DML
B. DSL = DDL + SDL
C. DSL= DDL-DML
D. None of the above

19. **VDL stands for.....**
A. Very small data language
B. View definition language
C. View data language
D. None of the above

20. **SQL stands for:**
A. Small Query Language
B. Simple Query Language
C. Structured Query Language
D. None of the above

21. **SQL, Spreadsheets, Report Generators, Code Generators are the example of**
A. 3 GL
B. 5 GL
C. 4 GL
D. None of the above

22. **GRANT and REVOKE are....**
A. DDL
B. DCL
C. DML
D. None of the above

23. **A compiler that converts embedded DML statements to normal procedure calls is known as:**
A. C++ compiler
B. Embedded DML pre-compiler
C. DML compiler
D. None of the above

24. **IMS, IMB, system 2000, NOMAD are the examples of....**
A. Hierarchical model
B. Network model
C. Relational model
D. None of the above

25. **The term "relation" was chosen by...**
A. Dr. Berry Boehm
B. Dr. Jacobson
C. Dr. E.F. Codd
D. None of the above

26. **Each row of data is known as a....**
A. Tuple
B. Degree
C. Cardinality
D. None of the above

27. **The number of tuples in a relation is known as...**
A. Cardinality
B. Modality
C. Degree
D. None of the above

28. **An ER. Model was introduced by...**
A. E.F. Codd
B. Constantine
C. P.P. Chen
D. None of the above

29. **The primary key of a weak entity needs to be formed. It is known as.....**
A. Discriminator of partial key
B. Weak key
C. Foreign key
D. None of the above

30. **The process of minimizing the difference between entities by identifying their common characteristics is known as.....**
A. Specialization
B. Multiplicity
C. Generalization
D. None one of the above

31. **The complement of generalization is.....**
A. Specialization
B. Distribution
C. Relation
D. None of the above

32. **The process of compiling information of an object, there by abstracting a higher level object is known as.....**
A. Specialization
B. Aggregation
C. Generalization
D. None of the above

33. **The relationship between a weak entity set is called as the.....**
A. Weak relationship
B. Connecting relationship
C. Identifying relationship
D. Associative relationship

34. **An ER-diagram that show the concepts of specialization and generalization are known as.....**
A. Extended ER diagram
B. Expended ER diagram
C. Effective ER diagram
D. Enhanced ER-diagram

35. **The need of ER-diagram arises depending upon the.....**
A. Nature of problem
B. Preferences of the database designer
C. Nature of entities
D. All of the above

36. **What are the different types of metadata?**
A. Operational metadata
B. Data mart metadata
C. Enterprise data ware house metadata
D. All of the above

37. **Types of data independence is/ are.....**
A. Physical data independence
B. Both A. and B.
C. Logical data independence
D. Global independence

38. **A data model consists of……**
A. One part B. Three part
C. Two part D. Four part

39. **Data models can be…**
A. Object based data models
B. Record based data models
C. Physical data models
D. All of the above

40. **Which one of the following is/ are oldest database model?**
A. Hierarchical model
B. Relational model
C. Network model
D. None of the above

41. **The physical data model describes…**
A. What data are stored in disk
B. How data is stored in the computer
C. Both A. and B.
D. None of the above

42. **The number of attributes in a relation is defined as its…….**
A. Tuple
B. Cardinality
C. Degree
D. None of the above

43. **The set of all possible values that an attribute may validly contain is called…**
A. Degree
B. Body of relation
C. Domains
D. Keys of the relation

44. **Many to many relationship can be implemented in…….**
A. Hierarchical model
B. Relational model
C. Network model
D. None of the above

45. **Types of entities are…**
A. Dependent
B. Both A. and B.
C. Independent
D. None of the above

46. **There are three types of degrees of relationships. They are……**
A. Binary relationship
B. Ternary relationship
C. Unary or recursive relationship
D. All of the mentioned above

47. **Which one of the following is/ are types of connectivity?**
A. 1: 1
B. M: M
C. 1:M
D. All of the above

48. **An attribute that cannot be further subdivided is called as….**
A. Composite attribute
B. Derived attribute
C. Atomic attribute
D. None of the above

49. **Which one of the following is composite attribute?**
A. Name B. DOB
C. Salary D. Id

50. **Entities are represented by….**
A. Circle B. Diamond
C. Rectangle D. Underlined

51. **Multi valued attributed are represented by…….**
A. Ellipsis
B. Circle
C. Double ellipsis
D. None of the above

52. **Directed lines represents….**
A. One occurrence
B. Two occurrence
C. Many occurrence
D. None of the above

53. **Undirected line represents….**
A. Once occurrence
B. Two occurrence
C. Many occurrence
D. None of the above

54. **The attribute is also known as…..**
A. Column of a relation
B. Degree of relation
C. Row of relation
D. None of the above

55. **An attribute or set of attributes that uniquely identifies a tuple within a relation is called as…**
A. Candidate key
B. Primary key
C. Super key
D. None of the above

56. **A table with column and row is called as a……**
A. Table
B. Key
C. Relation
D. None of the above

57. **Entities are nothing else but….**
A. Relations
B. Attributes
C. DBMS
D. None of the above

58. **Attribute corresponds to…….**
A. Row of the table
B. Degree of a table
C. Column of the table
D. None of the above

59. **Row of the relation is called as a….**
A. Domain
B. Relation
C. Tuple
D. None of the above

60. **A set of tuples at any given instant of time is called as…**
A. Table
B. Extension
C. Relation
D. None of the above

61. **The number of tuples of a relation is its…..**
A. Degree
B. Cardinality
C. Intension
D. None of the above

62. **A relation with degree N, is known as…**
A. N-array relation
B. 2-ary relation
C. 1-ary relation
D. None of the above

63. **Which of the following is a correct form of the equation?**
A. CK= SK+PK
B. CK= SK*PK
C. CK =SK-PK
D. None of the above

64. **Those candidate keys which are not currently selected as the primary key are called as…….**
A. Super keys
B. Alternate key
C. Candidate key
D. None of the above

65. **Which of the following is correct if AK = Alternate key, CK= Candidate Key and PK= Primary Key….**
A. AK = CK-PK
B. AK=SK-PK
C. AK=CK+PK
D. None of the above

66. **A key that has no meaning to the business or organization is.....**
A. Candidate key
B. Artificial key
C. Alternate key
D. None of the above

67. **The column in the child table that references a primary key of the parent table is called as...**
A. Candidate key
B. Composite key
C. Foreign key
D. None of the above

68. **A rule that states that in a base relation, the value of attribute of a primary key cannot be null is called as.....**
A. Entity integrity rule
B. Security integrity rule
C. Referential integrity rule
D. None of the above

69. **A NULL means.....**
A. Unknown
B. Known partially
C. Known
D. None of the above

70. **Dr. E.F. Codd gave.....**
A. 10 rules
B. 12 rules
C. 11 rules
D. 13 rules

71. **A virtual relation is also known as a.....**
A. View
B. Snap shot
C. Table
D. None of the above

72. **In order to perform union operation on two relations, both operand and relation s must be:**
A. Union compatible
B. Difference compatible
C. Set compatible
D. None of the above

73. **Which is true out of the following**
A. (A-B) = (B –A)
B. (B-A) = (B-C)
C. (A-B) not equal to (B-A)
D. None of the above

74. **Select operator(Sigma) works row wise whereas project –operator (pi) works**
A. Row –wise only
B. Both A. and B.
C. Column wise
D. None of the above

75. **When we want to display records with attributes from many relations then we use**
A. SELECT operation
B. JOIN operation
C. PROJECT operation
D. None of the above

76. **Relational calculus describes about.....**
A. How to evaluate a query
B. When to evaluate a query
C. What is to be retrieved
D. None of the above

77. **QUEL is a TRC language of which RDBMS...**
A. INGRESS
B. Oracle 8i
C. DB2
D. None of the above

78. **How many tables can be joined to create a view?**
A. 1
B. Depends on DBMS
C. 2
D. None of the above

79. **What is the cardinality of a table with 50 rows and 5 columns?**
A. 50
B. 250
C. 5
D. None of the above

80. **SQL stands for.....**
A. Structure Query Language
B. Simple Query Language
C. Structured Questioning Language
D. None of the above

81. **DDL Stands for.....**
A. Data Definition Language
B. Data Development Language
C. Data Design Language
D. None of the above

82. **INSERT, DELETE, UPDATE and SELECT are put under....**
A. DDLs B. DMLs
C. TCLs D. VDLs

83. **The process of joining of multiple strings is known as.....**
A. Selection
B. Concatenation
C. Projection
D. None of the above

84. **Aggregation shows a...**
A. 'has a' relationship
B. Both A and B
C. 'is –a ' relationship
D. None of the above

85. **To sort records we use...**
A. ORDER BY clause
B. GROUP clause
C. HAVING clause
D. None of the above

86. **% and _ (underscore) are....**
A. Relational operators
B. Like operators
C. Arithmetic operators
D. None of the above

87. **The logical tables of data extracted from existing tables are known as....**
A. Records
B. Queries
C. Views
D. None of the above

88. **Oracle provides a special table that can be used to test any function. This table is**
A. DUAL table
B. SALARY table
C. EMPLOYEE table
D. None of the above

89. **ROLLBACKS, COMMIT AND SAVEPOINT are...**
A. DMLs B. VDLs
C. DDLs D. TCL

90. **Hash function is used in which of these indexing methods.....**
A. Ordered indexing
B. Pinned indexing
C. Hashed indexing
D. None of the above

91. **Primary indexing is also known as...**
A. Clustering index
B. Hashed index
C. Non- clustering index
D. None of the above

92. ODBC stands for...
A. Open database connectivity
B. Online database connection
C. Open data connection
D. None of the above

93. A query within a query is called as...
A. Sub query
B. Parent query
C. New query
D. None of the above

94. The command used to set the top title for each page of a report is.....
A. BTITLE
B. TTITLE
C. CTITLE
D. None of the above

95. PL/ SQL stands for.....
A. Procedural Language/ Structured Query Language
B. Primary Language/ Simple Query Language
C. Parallel Language/ Simple Query List
D. None of the above

96. The process of decomposition of a table is known as.....
A. Specialization
B. Normalization
C. Generalization
D. None of the above

97. The process of Normalization was proposed by.....
A. Dr. E.F. Codd
B. Jacobson
C. Dr. Berry Boehm
D. None of the above

98. An association between two attributes of the same table is known as.....
A. FD
B. JD
C. MVD
D. None of the above

99. A table which is in 2NF, must be in...
A. 1NF B. 3NF
C. 2NF D. 4NF

100. After normalization, the original table can be obtained by...
A. Delete operation
B. Join operation
C. Cascade operation
D. None of the above

101. A table in 3NF must not have...
A. FDs
B. TDs
C. MVDs
D. JDss

102. BCNF stands for...
A. Babbage-codd Normal Form
B. Bakus-codd Normal form
C. Boyce-codd Normal Form
D. None of the above

103. MVD stands for...
A. Multi Valued Dependency
B. Many – Volume Dependent
C. Many – Value Dependency
D. None of the above

104. A rule to transform a relation into 4NF was given by.....
A. Fagin
B. Jacobson
C. E.F codd
D. None of the above

105. The process of Normalization is:
A. Reversible B. Iterative
C. Non-reversible D. Recursive

106. A set of changes that must be all made together is called as a.....
A. Atom
B. Concurrency
C. Transaction
D. None of the above

107. A transaction must be in....
A. Atomic
B. Large
C. Small
D. None of the above

108. ACID stands for
A. Again, common, internal, data
B. Atomic, common, internal, data
C. Atomic, consistent, isolation, durability
D. None of the above

109. A list of actions from a set of transactions is known as...
A. Statement
B. Transaction set
C. Schedule
D. None of the above

110. Types of database failure is/ are:
A. Hardware failure
B. Software failure
C. Network failure, natural disasters, sabotage
D. All of the above

111. To synchronize the concurrent accessing of database items, we use:
A. Transactions
B. Locks
C. States
D. None of the above

112. When a transaction never progresses then we say that is:
A. Aborted B. Shared
C. Starved D. Locked

113. During pessimistic approach, the order of operation execution is:
A. Read, validate, compute, write
B. Validate, computer, read, write
C. Validate, read, compute, write
D. None of the above

114. A phase in which all locks are requested is known as a:
A. Growing phase
B. Aborted phase
C. Shrinking phase
D. None of the above

115. No more locks requests can be asked for in:
A. Growing phase
B. Aborted phase
C. Shrinking phase
D. None of the above

116. Which of the following query processing method is more efficient?
A. Pipelining
B. Tunneling
C. Materialization
D. None of the above

117. A query execution strategy is evaluated by:
A. Execution plan
B. Data base catalog
C. Query tree
D. None of the above

118. DBMS is a collection of.....that enables users to create and maintain a database
A. Keys
B. Program
C. Translators
D. Language activity

119. **In a relational schema, each tuple is divided into fields called...**
A. Relations
B. Queries
C. Domains
D. All of the above

120. **In an ER model..... is described in the database by storing its data:**
A. Entity B. Relationship
C. Attribute D. Notation

121. **DFD stands for:**
A. Data Flow Diagram
B. Data file Diagram
C. Data flow document
D. None of the above

122. **A top to bottom relationship among the items in a database is established by a...**
A. Hierarchical schema
B. Relational schema
C. Network schema
D. All of the above

123. **Grant and revoke are.....statements.**
A. DDL
B. DML
C. DCL
D. No one of the above

124. **Key to represent relationship between tables is called...**
A. Primary key
B. Foreign key
C. Secondary key
D. None of the above

125. **Data independence means.**
A. Data is defined separately and not included in programs
B. Programs are not dependent on the physical attributes of data
C. Programs are not dependent on the logical attributes of data
D. Both B. and C.

126. **A.....is used to define overall design of the data.**
A. Schema
B. Data definition language
C. Application program
D. Data manipulation language

127. **DBMS helps in achieving ....**
A. Data independence
B. Neither A or B
C. Centralized control of data
D. Both A and B

128. **..... command can be used to modify a column in a table.**
A. Alter B. Set
C. Update D. Create

129. **The collection of information stored in a database at a particular moment of time is called as.....**
A. Schema of database
B. Data independence
C. Instance of database
D. Domain

130. **An advantage of the database management approach is:**
A. Data is dependent on programs
B. Data redundancy increases
C. Data is integrated and can be accessed by multiple programs
D. None of the above

131. **..... keyword is used to find the number of values in a column.**
A. TOTAL
B. ADD
C. COUNT
D. SUM

132. **Purpose of views is/ are....**
A. To hide sensitive columns
B. To hide complex queries
C. To update the rows and columns
D. All of the above

133. **.....is a language that allows the users to define data and their relationship to other types of data.**
A. Data Manipulation Language
B. Data Control Language
C. Data Definition Language
D. None of the above

134. **DDL statements is/ are...**
A. CREATE
B. RENAME
C. ALTER, DROP
D. All of the above

135. **DML can be can be categorized into....**
A. Procedural language
B. Both A. and B.
C. Non-procedural language
D. None of the above

136. **.....is a language that provides a set of operations to support the basic data manipulation operations on the data held in the database:**
A. DDL
B. DCL
C. DML
D. None of the above

137. **Examples of fourth generation language is/are:**
A. SQL
B. Code generator
C. Report generator, spreadsheet
D. All of the above

138. **.....is the ability to modify the physical schema without causing application programs to be written.**
A. Logical data independence
B. Both A and B
C. Physical data independence
D. None of the above

139. **DBMS architecture has..... levels.**
A. One B. Three
C. Two D. Four

140. **Highest level of abstraction is.....**
A. Conceptual or logical level
B. External or view level
C. Internal level or storage level
D. None of the above

141. **External view is defined by means of.....**
A. Internal schema
B. Conceptual schema
C. External schema
D. None of the above

142. **The major objective of ANSI-SPARC'S 3 level architecture is to provide data independence which means that upper levels are unaffected by changes in .....**
A. Lower levels
B. Both A and B
C. Middle levels
D. None of the above

143. **.....means that the conceptual schema (middle level) can be changed without affecting the existing external schemas.**
A. Physical data independence
B. Logical data independence
C. Mechanical data independence
D. None of the above

144. Take away privileges from users is called...
A. GRANT B. REVOKE
C. COMMIT D. COMMENT

145. The query processor component includes.
A. DML compiler, embedded DML pre-compiler
B. DDL interpreter
C. Query evaluation engine, storage manager
D. All of the above

146. Many to many relationships cannot be expressed in.....
A. Network data model
B. Hierarchical data model
C. Relational data model
D. None of the above

147. Relationship is represented by.....
A. Diamonds
B. Circles
C. Oval
D. None of the above

148. Generalization is....
A. Bottom up approach
B. Both A and B
C. Top down approach
D. None of the above

149. .....constraint ensures that the column cannot be null and that the values in the column will be unique.
A. Check
B. Not Null
C. Primary key
D. None of the above

150. To add new column and to modify existing column we use..... command.
A. Delete B. Alter
C. Drop D. Update

151. To add new integrity constraint and to drop integrity constraint we use...statement.
A. Update B. Delete
C. Alter D. Drop

152. The syntax of ALTER command in SQL is:
A. ALTER TABLE < TABLE NAME> ADD (COLUMN 1 TYPE WIDTH)
B. ALTER TABLE
C. CHANGE TABLE <TABLE NAME>
D. None of the above

153. DML commands are...
A. Insert
B. Update, select
C. Delete
D. All of the above

154. The candidate key is that you choose to identify each row uniquely is called .....
A. Alternate key
B. Foreign key
C. Primary key
D. None of the above

155. .....is used to determine whether a table contains duplicate rows:
A. Unique predicate
B. Null predicate
C. Like predicate
D. In predicate

156. To eliminate duplicate rows.....is used.
A. NO DUPLICATE
B. DISTINCT
C. ELIMINTE
D. None of the above

157. Which of the following are the properties of entities?
A. Groups B. Tables
C. Domains D. Attributes

158. Which database level is closest to the users?
A. External B. Physical
C. Internal D. Conceptual

159. .....is preferred method for enforcing data integrity.
A. Constraints B. Triggers
C. Stored procedure D. Cursors

160. The numbers of tuples in a relation is called its.....while the number of attributes in a relation is called its.....
A. Degree, cardinality
B. Rows, columns
C. Cardinality, degree
D. Columns, rows

161. The language that requires a user to specify the data to be retrieved without specifying exactly how to get is is.....
A. Procedural DML
B. Procedural DDL
C. Non-procedural DML
D. Non-procedural DDL

162. The database schema is written in:
A. HLL B. DDL
C. DML D. DCL

163. Which are the two ways in which entities can participate in a relationship?
A. Passive and active
B. Simplex complex
C. Total and partial
D. All of the above

164. Which one of the following statements is false?
A. The data dictionary is normally maintained by the database administrator
B. Data elements in the database can be modified by changing the data dictionary.
C. The data dictionary contains the name and description of each data element.
D. The data dictionary is a tool used exclusively by the database administrator.

165. .....defines rules regarding the values allowed in column and is the standard mechanism for enforcing database integrity.
A. Column B. Index
C. Constraint D. Trigger

166. Which of the following is/are the DDL statements?
A. Create
B. Alter
C. Drop
D. All of the above

167. Centralizing the integrity checking directly under the DBMS..... duplication and ensures the consistency and validity of the database
A. Increases
B. Does not reduce
C. Skips
D. Reduces

168. In SQL, which command is used to issue multiple CREATE table, create, view and grant statements in a single transaction?
A. Create package
B. Create cluster
C. Create schema
D. All of the above

169. In SQL, the CREATE TABLESPACE is used.
A. To create a place in the database for storage of scheme objects, rollback segments, and naming the data files to comprise the table space.
B. To create a database trigger
C. To add / rename data files, to change storage
D. All of the above

170. What are the different events in Triggers?
A. Define, create
B. Insert, update, delete
C. Drop, comment
D. Select, commit

171. Which of the following SQL command can be used to modify existing data in a database table?
A. MODIFY B. CHANGE
C. UPDATE D. NEW

172. To pass on granted privileges to another user the……. clause is used
A. Create B. Revoke
C. Grant D. Commit

173. A …….is a set of columns that identifies every row in a table
A. Composite key B. Foreign key
C. Candidate key D. Super key

174. ……is the powerful language for working with RDBMS
A. Embedded programs
B. Query language
C. Dynamic programs
D. Static language program

175. The file in DBMS is called as……in RDBMS
A. Console B. Table
C. Schema D. Object

176. In……., we have a strict parent child relationship only
A. Hierarchical databases
B. Relational database
C. Network databases
D. Object oriented database

177. Which normal form is considered adequate for relational database design?
A. 2 NF
B. BCNF
C. 3NF
D. All of the above

178. Which operators tests column for the absence of data?
A. IS NULL operators
B. Like operators
C. Assignment operators
D. OR operators

179. …….is a statements that is executed automatically by the system
A. Trigger
B. Durability
C. Assertion
D. Integrity constraint

180. The third generation DBMS includes:
A. Relational data model
B. ORDBMS and OODBMS
C. ER data model
D. None of the above

181. LOB stands for:
A. Large object base
B. List object
C. Large object
D. None of the above

182. A pointer to an external file is:
A. BLOB
B. BFILE
C. CLOB
D. None of the above

183. Fragmentation is used in:
A. ORDBMS B. CDBMS
C. DDBMS D. RDBMS

184. Identical DBMS software is found in:
A. Homogeneous DDBMS
B. Both A and B
C. Heterogeneous DDBMS
D. None of the above

185. FDBS stands for:
A. Future database system
B. Final database system
C. Federated database system
D. None of the above

186. CJ date gave:
A. 10 rules B. 12 rules
C. 11 rules D. 13 rules

187. ANSI-SPARC architecture is for:
A. Centralized DBMS
B. Decentralized DBMS
C. Distributed DBMS
D. None of the above

188. Data allocation involves which of these strategies:
A. Replication
B. Selection
C. Duplication
D. None of these

189. Size of DB2 is:
A. 10 k
B. 1000 k
C. 100 k
D. 10,000 k

190. Consider join of a relation R with a relations S. if R has m tuples and S and n tuples, then maximum and minimum sizes of the join respectively are:
A. M + n and 0
B. M + n and |m – n|
C. mn and 0
D. mn and 0

191. For two union compatible relations R1 (Am B. and R2 (C, D., what is the result of the operation. R_2 (C, D.. what is the result of the operation $R_1A = CAB = DR_2$?
A. $R_1 \cup R_2$ B. $R_1 - R_2$
C. $R_1 \times R_2$ D. $R_1 \cap R_2$

192. Relations produced from an E-R model will always be in:
A. 1 NF B. 3 NF
C. 2 NF D. B CNF

193. A primary key, if combined with a foreign key creates:
A. Parent child relationship between the tables that connect them
B. Many to many relationship between the tables that connect them
C. Network model between the tables connect them
D. None of these

194. Network models are complicated by physical keys, but the relation model is:
A. Faster because it uses logical keys
B. Slower because it uses physical keys
C. Faster because it uses physical keys
D. Slower because it uses logical keys

195. Discriminator of the weak entity is:
A. Account number
B. {account number, date}
C. Transaction number
D. Date

196. **Primary key of the weak entity is:**
A. Account number
B. {account number, transaction number}
C. {account number, date}
D. {transaction number, date}

197. **A relational model which allows non-atomic domains is:**
A. Nested relational data model
B. Hierarchical date model
C. Non-atomic date model
D. None of the above

198. **Let R (a, b, C. and S (d, e, f) be two relations in which d is the foreign key of S that refers to the primary key of R.**
Consider following four operations R and S.
i. insert into R ii. Insert into S
iii. delete from R iv. Delete from S
Which of the following can cause violation of the referential integrity constraint above?
A. Both I and IV
B. All of the above
C. Both II and III
D. None of the above

199. **Which of the following is not true for the traditional approach to information processing?**
A. There is common sharing of data among the various applications
B. It is file oriented
C. Programs are dependent on the files
D. It is inflexible

200. **The database environment has all of the following components except.....**
A. Users
B. Database
C. Separate files
D. Database administration

201. **The way a particular application views the data from the database that the application uses is a:**
A. Module B. Schema
C. Relational model D. Subschema

202. **The data manipulation language (DML).**
A. Refers to data using physical addresses
B. Cannot interface with high level programming language
C. Is used to define the physical characteristics of each record
D. None of the above

203. **The relational model uses some unfamiliar terminology. A tuple is a equivalent to:**
A. Record B. File
C. Field D. Data base

204. **Database administrator is, in effect, the coordinator between___ and___.**
A. DBMS ; data base
B. Database ; users
C. Application program; database
D. Application programs; users

205. **A network structure:**
A. Is a physical representation of the data
B. Allows a many to many relationship
C. Is conceptually simple
D. Will be the dominant database of the future

206. **An advantage of the database approach is:**
A. Elimination of the data redundancy
B. Increases security
C. Ability to associate related data
D. All of the above

207. **Which of the following hardware components is the most important to the operation of a database management system?**
A. High resolution video display
B. High speed, large capacity disk
C. Printer
D. Plotter

208. **Database management systems are intended to:**
A. Eliminate data redundancy
B. Establish relationship among records in different files
C. Manage file access
D. All of the above

209. **Which of the following is not characteristic of a relational database model?**
A. Tables
B. Records
C. Tree like structure
D. Complex logical relationships

210. **Which of the following is not the responsibility of the utilities component of DBMS software?**
A. Creating the physical and logical designs
B. Removing flagged records for deletion
C. Creating and maintaining the data dictionary
D. Monitoring performance

211. **Which of the following is a type of DBMS software?**
A. Data base manipulation language
B. Utilities
C. Query language
D. All of the above

212. **A database administrator's function is:**
A. Data base design
B. Performance monitoring
C. Backing up the database
D. All of the above

213. **A data dictionary doesn't provide information about:**
A. Where data is located
B. The size of the storage disk
C. Who owns or is responsible for the data
D. How the data is used

214. **Which of the following is a serious problem of file management systems?**
A. Difficult to up data
B. Data redundancy
C. Lack of data independence
D. All of the above

215. **A database management system.**
A. Allows simultaneous access to multiple file
B. Can do more than a record management system
C. Is a collection of programs for managing data in a single file
D. Both A and B

216. **In a large DBMS.**
A. Each user can "see" only a small part of the entire data base
B. Each subschema contains every field in the logical schema
C. Each user can access every subschema
D. All of the above

217. **A transparent DBMS.**
A. Cannot hide sensitive information from users
B. Keeps its logical structure hidden from users
C. Keeps its physical structure hidden from users
D. Both A and B

218. **Goals for the design of the logical schema include.**
A. Avoiding data inconsistency
B. Being able to construct queries easily
C. Being able to access data efficiently
D. All of the above

219. **A top to bottom relationship among the items in a database is established by a:**
A. Hierarchical schema
B. Relational schema
C. Network schema
D. All of the above

220. **A network schema.**
A. Restricts the structure to a one too many relationships
B. Permits many to many relationships
C. Stores data in tables
D. None of the above

221. **In a relational schema, each tuple is divided into fields called.**
A. Relations
B. Queries
C. Domains
D. None of the above

222. **The online soft copy displays a customer's charge account to respond to an inquiry is an example of:**
A. Forecasting report
B. Exception report
C. Regularly scheduled report
D. On demand report

223. **If a field size is too small for the longest piece of data to be entered, then,**
A. Data base program will freeze
B. Part of the data will be cut off
C. Field will automatically expand
D. None of the above

224. **Which of the following is (are) logical data base structure?**
A. Network
B. Chain
C. Tree
D. All of the above

225. **Which of the following is not a relational data of DBMS?**
A. Fox Pro
B. 4th Dimension
C. dBASEIV
D. ReFlex

226. **Consider a relation geq which represents "greater than or equal to", that is:**

(x, y)∈ geq only if y > = x

Create table eeq (1b integer not null

Ub integer not null

Primary key 1b

Foreign key (uB. references geq on delete cascade)

Which of the following is possible if a tuple (x, y) is deleted?
A. A tuple (z, w) with z > y is deleted
B. A tuple (z, w) with z ><x is deleted
C. A tuple (z, w) with z > x is deleted
D. The deletion of (x, y) is prohibited

227. **Given relations r (w, x) and s(y, z), the result of select distinct w, x from r, s is guaranteed to be the same as r, provided:**
A. R has no duplicates and s is non empty
B. R and s have no duplicates
C. S has no duplicates and r is non empty
D. R and s have the same number of tuples

228. **In SQL, relation can contain null values, and comparisons with null values are treated as unknown suppose all comparisons with a null value are treated as false.**

Which of the following pairs is not equivalent?
A. $X = 5$ not (not $(x = 5)$)
B. $X = 5x > 4$ and $x < 6$, where x is an integer
C. $X \neq 5$ not $(x = 5)$
D. None of the above

229. **The SQL expression.**

Select distinct T. branch name from branch T, branch S where T. assets > S. assets and S. branch city = "TENALI"

Find the names of:
A. All branches that have greater assets than some branch located in TENALI
B. All branches that have greater assets than all branches located in TENALI
C. The branch that has the greatest asset in TENALI
D. Any branch that has greater asset than any branch located in TENALI

230. **The employee salary should not be greater than Rs. 2000. This is:**
A. Integrity constraint
B. Over-defined constraint
C. Referential constraint
D. Feasible constraint

231. **Manager's salary details are hidden from the employee. This is:**
A. Conceptual level data hiding
B. External level data hiding
C. Physical level data hiding
D. None of the above

232. **Trigger is a:**
A. Statement that enables to start any DBMS
B. Statement that is executed by the user when debugging an application program
C. Condition the system tests for the validity of the database user
D. Statement that is executed automatically by the system as a side effect of a modification to the database

233. **If P and Q are predicates and P is the relational algebra expression, then which of the following equivalence are valid?**
A. $\sigma_p(\sigma_Q(e)) = \sigma_Q(\sigma_p(e))$
B. $\sigma_Q(\sigma_p(e)) = (\sigma_{p \wedge Q}(e))$
C. $\sigma_p(\sigma_Q(e)) = \sigma_Q(\sigma_{p \wedge Q}(e))$
D. All of the above

234. **Which of the following contains a complete record of all activity that affected the contents of a database during a certain period of time?**
A. Report writer
B. Transaction log
C. Query language
D. Data manipulation language

235. **Updating a data base means.**
A. Revising the files
B. Reorganizing the database
C. Modifying or adding record occurrences
D. All of the above

236. **One data dictionary software package is called.**
A. DB/DC dictionary
B. ACCESS
C. TOTAL
D. All of the above

237. A logical schema.

A. Is entire data base

B. Is a standard way of organizing information into a accessible part

C. Describes how data is actually stored on disk

D. None of the above

238. Subschema can be used to:

A. Create very different personalized views of the same data

B. Present information in different formats

C. Hide sensitive information by omitting fields from the subschema description

D. All of the above

239. A data dictionary is a special file that contains.

A. Names of all fields in all files

B. Width of all fields in all files

C. Data types of all fields in all files

D. All of the above

240. Queries to a data base.

A. Are written in English

B. Can use aggregate functions like SUM and COUNT

C. Both A and B

D. None of the above

241. Data integrity control.

A. Is used to set upper and lower limits on numeric data

B. Requires the use of passwords to prohibit unauthorized access to the file

C. Has the data dictionary to keep the data and time of last access, last back up, and most recent modification for all files

D. None of the above

242. Information can be transferred between DBMS and...

A. Spread sheet program

B. Graphics program

C. Word processor program

D. All of the above

243. A race condition occurs when.

A. Two concurrent activities interact to cause a processing error

B. Two users of the DBMS are interacting with different files at the same time

C. Both A and B

D. None of the above

244. Addresses are considered.

A. Numeric fields

B. Relational fields

C. Data fields

D. Alpha fields

245. A data is often entered in a format such as 81/12/30 because.

A. Military prefers this format

B. It allows the user to sort by year

C. Reader can find the year faster

D. None of these

246. Which of the following contains complete record of all activity that affected the contents of a database during a certain period of time?

A. 4 GL B. Oracle

C. D-BASE D. SQL

247. In a multiuser data base, if two users wish to update the same record at the same time, they are prevented from doing so by:

A. Jamming B. Documentation

C. Password D. Record lock

248. A relational data base management (RDBM) package manages data in more than one file at once. It organize these files as:

A. Tables B. Tuple

C. Relations D. Both A and B

249. Given relations y (w, x) and S(y, z), the result of select distinct w, x from r, S is guaranteed to be the same as y, empty.

A. Y has no duplicates and s is non empty

B. Y and s have no duplicates

C. S has no duplicates and y is non empty

D. Y and S have the same number of tuples

250. The PROJECT command will create new table that has:

A. More fields than the original table

B. Both A and B

C. More rows than original table

D. None of the above

251. A report generator is used to:

A. Update files

B. Both A and B

C. Print files on paper

D. None of the above

252. Let domain set of an attribute consists of signed four digit numbers. What is the percentage of reduction in storage space of this attribute if it is stored as an integer rather than in character form?

A. 80%

B. 60%

C. 20%

D. 40%

253. Which of the following is/are correct?

A. An SQL query automatically eliminates duplicates

B. An SQL query will not work if there are no indexes on the relations

C. SQL permits attributes name to be repeated in the same relation

D. None of the above

254. Let R = (A, B, C, D, E, F) be a relation scheme with the following dependencies:

$C \rightarrow F$, $E \rightarrow a$, $EC \rightarrow D$, $A \rightarrow B$.

Which of the following is a key for R?

A. CD B. AE

C. EC D. AC

255. Consider the schema R = (S, T, U, V) and the dependencies:

$S \rightarrow T$, $T \rightarrow U$, $U \rightarrow V$ and $V \rightarrow S$.

If R = (R1 and R2) be a decomposition such that:

$R1 \cap R2 = \phi$, then decomposition is:

A. Not in 2 NF

B. In 2 NF but not in 3 NF

C. In 3 NF but not in 2 NF

D. In both 2NF and 3NF

256. Which normal form is considered adequate for normal relationship database design?

A. 2NF B. 4NF

C. 3NF D. 5NF

257. A functional dependency of the form $x \rightarrow y$ is trivial if:

A. $Y \subseteq x$ B. $X \subseteq y$

C. $y \subset x$ D. $x \subset y$ and $y \subset x$

258. If a relation scheme is in BCNF, then it is also in:

A. 1 NF B. 3 NF

C. 2 NF D. None of these

259. Any binary relation is in:

A. 1 NF
B. 3 NF
C. 2 NF
D. B CNF

260. Normalization of database is used to:

A. Eliminate redundancy
B. Improve efficiency
C. Improve security
D. Minimize errors

261. Functional dependencies are a generalization of;

A. Key dependencies
B. Database dependencies
C. Relation dependencies
D. None of the above

262. Every Boyce-Codd Normal Form (BCNF) decomposition is:

A. Dependency preserving
B. Need be dependency preserving
C. Not dependency, preserving
D. None of the above

ANSWER SHEET

1.A	2.A	3.C	4.C	5.B	6.A	7.C	8.C	9.A	10.C
11.C	12.A	13.A	14.B	15.A	16.C	17.C	18.A	19.B	20.C
21.C	22.B	23.C	24.A	25.C	26.A	27.A	28.C	29.A	30.C
31.A	32.B	33.C	34.D	35.D	36.D	37.B	38.B	39.D	40.A
41.B	42.C	43.C	44.C	45.B	46.D	47.D	48.C	49.A	50.C
51.C	52.A	53.C	54.A	55.C	56.C	57.A	58.C	59.C	60.B
61.B	62.A	63.C	64.B	65.A	66.B	67.C	68.A	69.A	70.B
71.A	72.A	73.C	74.B	75.B	76.C	77.A	78.D	79.A	80.A
81.A	82.B	83.B	84.B	85.A	86.B	87.C	88.A	89.D	90.C
91.A	92.A	93.A	94.B	95.A	96.B	97.A	98.A	99.A	100.B
101.B	102.C	103.A	104.A	105.A	106.C	107.A	108.C	109.C	110.D
111.B	112.C	113.C	114.A	115.C	116.A	117.A	118.B	119.C	120.A
121.A	122.A	123.C	124.B	125.D	126.A	127.D	128.A	129.C	130.C
131.C	132.D	133.C	134.D	135.B	136.C	137.D	138.C	139.B	140.B
141.C	142.A	143.B	144.B	145.D	146.B	147.A	148.A	149.C	150.B

151.C	152.A	153.D	154.C	155.A	156.B	157.D	158.A	159.A	160.C
161.C	162.B	163.C	164.B	165.C	166.D	167.D	168.C	169.A	170.B
171.C	172.C	173.D	174.B	175.B	176.A	177.C	178.A	179.A	180.C
181.C	182.B	183.C	184.A	185.C	186.B	187.A	188.A	189.C	190.C
191.D	192.B	193.A	194.A	195.C	196.B	197.A	198.C	199.A	200.C
201.D	202.D	203.A	204.B	205.B	206.D	207.B	208.D	209.C	210.A
211.D	212.D	213.B	214.D	215.B	216.D	217.C	218.C	219.A	220.B
221.C	222.D	223.D	224.D	225.B	226.A	227.C	228.A	229.C	230.A
231.B	232.D	233.D	234.B	235.C	236.A	237.B	238.D	239.B	240.D
241.B	242.B	243.D	244.D	245.D	246.C	247.A	248.D	249.A	250.D
251.C	252.B	253.D	254.C	255.D	256.C	257.A	258.B	259.B	260.A
261.A	262.B								