

**JNTU ONLINE EXAMINATIONS [DDB]**

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1. A schedule is correct if it is \_\_\_\_\_ [01D01]
  - a. Concurrent
  - b. Parallel
  - c. Random
  - d. Serializable
2. If A and B are two events at the same site and A occurred before B then [01D02]
  - a.  $A \rightarrow B$
  - b.  $A \leftarrow B$
  - c.  $A \neq B$
  - d.  $A \uparrow B$
3. If the event A consist in sending the message and Event B consists in receiving the same message then [01D03]
  - a.  $A \rightarrow B$
  - b.  $A \leftarrow B$
  - c.  $A \neq B$
  - d.  $A \uparrow B$
4. The relation  $\rightarrow$  is [01D04]
  - a. Partial Ordering
  - b. No Ordering
  - c. Total Ordering
  - d. Either NO or Total Ordering
5. Which of the following sufficient condition ensure that two schedules are equivalent [01G01]
  - a. Each read operation reads data item values which are produced by the same write operation in both the schedules
  - b. The initial write operation on each data item is the same in both the schedules
  - c. Each read operation reads data item values which are produced by the different write operation in both the schedules
  - d. -
6. Two transactions  $T_i$  and  $T_j$  execute \_\_\_\_\_ in a schedule S if the last operation of  $T_i$  precedes the first operation of  $T_j$  in S [01M01]
  - a. Concurrently
  - b. Serially
  - c. Randomly
  - d. parallel
7. Two transactions  $T_i$  and  $T_j$  execute \_\_\_\_\_ in a schedule S if the last operation of  $T_i$  does not precedes the first operation of  $T_j$  in S [01M02]
  - a. Concurrently
  - b. Serially
  - c. Randomly
  - d. parallel
8. The execution of transactions  $T_1, T_2, \dots, T_n$  is correct if [01M03]
  - a. Each local schedule  $S_k$  is Random
  - b. Each local schedule  $S_k$  is Serializable
  - c. Each local schedule  $S_k$  is Concurrent
  - d. Each local schedule  $S_k$  is Parallel
9. There exists a \_\_\_\_\_ of  $T_1, \dots, T_n$  such that if  $T_i < T_j$  [01M04]
  - a. Partial Ordering
  - b. No Ordering
  - c. Total Ordering
  - d. Either partial or no ordering
10. For any two events A and B, A occurs after B is represented as [01M05]
  - a.  $TS(A) = TS(B)$
  - b.  $TS(A) > TS(B)$
  - c.  $TS(A) < TS(B)$
  - d.  $TS(A) \neq TS(B)$
11. A schedule is also called as [01S01]
  - a. Log
  - b. file
  - c. Record
  - d. Tuple
12. In a schedule s operation  $Q_i$  precedes  $Q_j$  is represented as [01S02]
  - a.  $Q_i > Q_j$

- b.  $Q_i = Q_j$
  - c.  $Q_i < Q_j$
  - d.  $Q_i \neq Q_j$
13. Two operations are in \_\_\_\_\_ if they operate on the same data item, one of them is a write operation and they are issued by different transactions [01S03]
- a. Serial
  - b. Conflict
  - c. Random
  - d. Concurrent
14. The sequence of operations performed by transactions at a site is a \_\_\_\_\_ schedule [01S04]
- a. Local
  - b. Global
  - c. Parallel
  - d. Concurrent
15. \_\_\_\_\_ is a correct concurrency control method for a centralized database [01S05]
- a. 2-phase locking
  - b. 1-phase locking
  - c. 4 phase locking
  - d. 3 phase locking
16. Ordering of events in distributed concurrency control is done based on [01S06]
- a. Timestamp of events
  - b. Availability of events
  - c. Arrival of events
  - d. Either Arrival or Availability of Events
17. If  $A \rightarrow B$  and  $A \rightarrow C$  leads to [01S07]
- a.  $B \rightarrow C$
  - b.  $B \leftarrow C$
  - c.  $B \leftrightarrow C$
  - d.  $B \uparrow C$
18. Two events A and B are pseudo-simultaneous if [01S08]
- a.  $A \rightarrow B$  and  $B \rightarrow A$
  - b.  $A \rightarrow B$  or  $B \rightarrow A$
  - c. Neither  $A \rightarrow B$  nor  $B \rightarrow A$
  - d. Either  $A \rightarrow B$  or  $B \rightarrow A$
19. For any two events A and B ,  $A \rightarrow B$  if [01S09]
- a.  $TS(A) = TS(B)$
  - b.  $TS(A) > TS(B)$
  - c.  $TS(A) < TS(B)$
  - d.  $TS(A) \neq TS(B)$
20. Event A is older than event B if [01S10]
- a.  $TS(A) = TS(B)$
  - b.  $TS(A) > TS(B)$
  - c.  $TS(A) < TS(B)$
  - d.  $TS(A) \neq TS(B)$
21. \_\_\_\_\_ in a distributed database increases the probability of deadlocks [02D01]
- a. Redundancy
  - b. Concurrency
  - c. Reliability
  - d. Scalability
22. \_\_\_\_\_ collects the partial information to built a simplified DWFG [02D02]
- a. Local deadlock detector
  - b. Local deadlock preventor
  - c. Global deadlock preventor
  - d. Global deadlock detector
23. \_\_\_\_\_ method exploits the opportunity which helps in reducing the communication costs [02D03]
- a. Hierarchical Controllers
  - b. Network Controllers
  - c. Relational Controllers
  - d. Either Hierarchical or Relational
24. \_\_\_\_\_ are detected by each site on Local wait for graph [02D04]
- a. Potential deadlock cycles
  - b. Dynamic deadlock cycles
  - c. Statistical deadlock cycles
  - d. No Deadlock cycles

25. The approach for solving false deadlocks are [02D05]
- a. Treating false deadlocks s real ones
  - b. Validating the detected cycles
  - c. **Either Treating false deadlocks s real ones or Validating the detected cycles**
  - d. Neither Treating false deadlocks s real ones nor Validating the detected cycles
26. Direction of edge towards LWFG indicate \_\_\_\_\_ [02M01]
- a. **Input ports**
  - b. Output ports
  - c. Both input and output ports
  - d. Neither input nor output ports
27. Direction of edge exiting LWFG indicate \_\_\_\_\_ [02M02]
- a. **Input ports**
  - b. **Output ports**
  - c. Both input and output ports
  - d. Neither input nor output ports
28. \_\_\_\_\_ involves the selection of one or more transactions to be aborted and restarted [02M03]
- a. Deadlock Avoidance
  - b. **Deadlock Detection**
  - c. Deadlock Prevention
  - d. **Deadlock Resolution**
29. Which of the following forms the idea of transmitting the information of the DWFG between sites to detect deadlocks [02M04]
- a. Deadlock detection using centralized or hierarchical control
  - b. Distributed Deadlock detection
  - c. **Both A and B**
  - d. Deadlock prevention
30. Which of the following method consists in avoiding the occurrence of deadlock by discovering " dangerous " situation in priori [02M05]
- a. Deadlock detection using centralized or hierarchical control
  - b. Distributed Deadlock detection
  - c. **Deadlock detection using centralized or hierarchical control,Distributed Deadlock detection**
  - d. Deadlock prevention
31. Detection of deadlock corresponds to determination of \_\_\_\_\_ in wait for graph [02S01]
- a. Node
  - b. Edge
  - c. **Cycle**
  - d. Either Node or edge
32. \_\_\_\_\_ wait for graphs are the portion of distributed wait for graph consisting of only nodes and edges which are completely contained at a single site [02S02]
- a. **local**
  - b. Global
  - c. Centralized
  - d. Either Centralized or Global
33. A deadlock is local if it is caused by [02S03]
- a. **LWFG**
  - b. BWFG
  - c. CWFG
  - d. DWFG
34. \_\_\_\_\_ starts at an input port and searches backward along the local graph until it reaches an output port [02S04]
- a. **Local deadlock detector**
  - b. Local deadlock preventor
  - c. Global deadlock preventor
  - d. Global deadlock detector
35. \_\_\_\_\_ is vulnerable to failures of the sites where the centralized detector runs [02S05]
- a. Deadlock Avoidance
  - b. **Deadlock Detection**
  - c. Deadlock Prevention
  - d. Deadlock Resolution
36. Leaves of the deadlock detectors trees have [02S06]
- a. **Local deadlock detectors trees**
  - b. Nonlocal deadlock detectors tree
  - c. Either local or nonlocal deadlock detectors tree
  - d. Neither local nor nonlocal deadlock detectors tree
37. Non Leaves of the deadlock detectors trees have [02S07]
- a. **Local deadlock detectors trees**

- b. Nonlocal deadlock detectors tree
  - c. Both local and nonlocal deadlock detectors tree
  - d. Neither local nor nonlocal deadlock detectors tree
38. The choice of hierarchy in the performance of hierarchical deadlock detection reflects \_\_\_\_\_  
Topology [02S08]
- a. Relational
  - b. Object
  - c. Network
  - d. Neither object nor Network
39. In Local wait for graph all input and output ports are collected into a single node called \_\_\_\_\_  
[02S09]
- a. Internal node
  - b. External node
  - c. Mixed node
  - d. Individual node
40. The delay which is associated with the transmission of messages which transfer the information for deadlock detection can cause the detection of \_\_\_\_\_ [02S10]
- a. True Deadlock
  - b. False Deadlock
  - c. No Deadlock
  - d. Partial Deadlock
41. Timestamp mechanism is [03D01]
- a. Deadlock Dependent
  - b. Deadlock Free
  - c. Deadlock oriented
  - d. Deadlock Independent
42. Buffering of an operation means that the operation is [03D02]
- a. Executed
  - b. Rejected
  - c. Either executed or Rejected
  - d. Neither executed nor rejected
43. \_\_\_\_\_ mechanism allows a transaction to read or write a data item x only if x had been last written by an older transaction [03M01]
- a. Concurrency Control
  - b. Serial Control
  - c. Both concurrency and serial control
  - d. Neither concurrency nor serial control
44. Let TS be the timestamp of the read operation on a data item x. If  $TS < WTM(x)$  the \_\_\_\_\_ operation is rejected [03M02]
- a. Read
  - b. Write
  - c. Both Read and Write
  - d. Neither read nor write
45. Prewrites is equivalent to applying \_\_\_\_\_ on data [03M03]
- a. Exclusive Lock
  - b. Inclusive Lock
  - c. Both Exclusive and inclusive lock
  - d. Neither Inclusive nor exclusive
46. Each transaction receives a timestamp when it is initiated at its site of \_\_\_\_\_ [03S01]
- a. Destination
  - b. Origin
  - c. Both Origin and Destination
  - d. Both Source and destination
47.  $RTM(x)$  indicate [03S02]
- a. Largest timestamp of a read operation
  - b. Largest timestamp of a write operation
  - c. Smallest Timestamp of read operation
  - d. Smallest Timestamp of write operation
48.  $WTM(x)$  indicate [03S03]
- a. Largest timestamp of a read operation
  - b. Largest timestamp of a write operation
  - c. Smallest Timestamp of read operation
  - d. Smallest Timestamp of write operation
49. \_\_\_\_\_ requires a interval during which all the agents of the transactions are capable of shorting or committing [03S04]
- a. Two-Phase Commitment

- b. Three-Phase commitment
  - c. Four Phase Commitment
  - d. Five Phase Commitment
50. Timestamp mechanism is [04D01]
- a. Deadlock Dependent
  - b. Deadlock Free
  - c. Deadlock oriented
  - d. Deadlock Independent
51. Buffering of an operation means that the operation is [04D02]
- a. Executed
  - b. Rejected
  - c. Either executed or Rejected
  - d. Neither executed nor rejected
52. In which of the following phase, a transaction reads data item from the database, perform computation and determines new values for the data item of its write set. [04M01]
- a. Read Phase
  - b. Validation Phase
  - c. Write Phase
  - d. Both Read and Write
53. In which of the following phase , a test is performed to see whether the application of the updates to the database which has been computed by the transaction would cause a loss of consistency or not [04M02]
- a. Read Phase
  - b. Validation Phase
  - c. Write Phase
  - d. Both Read and Write
54. In which of the following phase , the updates are applied to the database [04M03]
- a. Read Phase
  - b. Validation Phase
  - c. Write Phase
  - d. Both Read and Write
55. \_\_\_\_\_ transactions are explicitly analyzed for conflicts [04S01]
- a. Pending
  - b. Committed
  - c. Both Pending and Committed
  - d. Both Read and Write
56. Each transaction receives a timestamp during \_\_\_\_\_ [04S02]
- a. Initialization
  - b. Execution
  - c. Termination
  - d. Validation
57. Each site performs a local \_\_\_\_\_ of each local Subtransaction [04S03]
- a. Verification
  - b. Validation
  - c. Both Verification and Validation
  - d. Neither Verification nor Validation
58. The key element for understanding the validation is in [04S04]
- a. Voting Rule
  - b. Naming Rule
  - c. Either Voting or Data Rule
  - d. Nether Data nor Voting Rule
59. The transactions on the data item record the effect of \_\_\_\_\_ Transactions [04S05]
- a. Pending
  - b. Committed
  - c. Both Pending and Committed
  - d. Both Read and Write
60. The \_\_\_\_\_ of the system is inversely proportional to the frequency of failures [05D01]
- a. Scalability
  - b. Security
  - c. Reliability
  - d. Verification
61. \_\_\_\_\_ constraints are used in the higher level of database applications [05D02]
- a. Consistency
  - b. Concurrency
  - c. Scalability
  - d. Reliability

62. Application Independent specifications of reliability consists in requiring that transactions contain their \_\_\_\_\_ [05G01]
- a. Durability
  - b. Isolation
  - c. Atomicity
  - d. -
63. Deviation from the Original behavior is defines as [05M01]
- a. Scalability
  - b. Security
  - c. Failure
  - d. Verification
64. Which of the following feature is used to determine whether each site is operational or failed [05M02]
- a. Determining the state of the network
  - b. Detection and resolution of inconsistencies
  - c. Finding checkpoints and cold restart
  - d. Commission features
65. Which of the following strategy is used for dealing with failures to sacrifice correctness to availability [05M03]
- a. Determining the state of the network
  - b. Detection and resolution of inconsistencies
  - c. Finding checkpoints and cold restart
  - d. Commission features
66. \_\_\_\_\_ is required if the site information is lost at a site of network. [05M04]
- a. Determining the state of the network
  - b. Detection and resolution of inconsistencies
  - c. Cold restart
  - d. Commission features
67. \_\_\_\_\_ is defined as a measure of the success with which the system conforms to some authoritative specification of the behavior [05S01]
- a. Scalability
  - b. Security
  - c. Reliability
  - d. Verification
68. \_\_\_\_\_ protocols allows a transaction to correctly terminate even in the presence of failures [05S02]
- a. Initialization
  - b. Execution
  - c. Termination
  - d. Elimination
69. Errors are called \_\_\_\_\_ if a site did not answer to a message [05S03]
- a. Emissions
  - b. Commission
  - c. Inclusion
  - d. Byzantine agreement
70. Errors are called \_\_\_\_\_ if failed components can sometimes also perform some wrong actions instead of simply ceasing their activity [05S04]
- a. Emissions
  - b. Commission
  - c. Inclusion
  - d. Byzantine agreement
71. \_\_\_\_\_ is referred as recognizing the wrong messages sent by a failed site is analogues to solving a very general problem [05S05]
- a. Emissions
  - b. Commission
  - c. Inclusion
  - d. Byzantine agreement
72. The 3-phase commitment protocol contain \_\_\_\_\_ phases for aborting a transaction [06D01]
- a. 1
  - b. 2
  - c. 3
  - d. 4
73. \_\_\_\_\_ protocol must be reentrant [06D02]
- a. Blocking
  - b. Suspended
  - c. Termination

d. Pending

74. \_\_\_\_\_ mean that a failed site determines the outcome of the transaction at restart without having to access remote recovery information [06D03]

a. Independent recovery

b. Dependent Recovery

c. No Recovery

d. Any Recovery

75. State information must be stored in \_\_\_\_\_ Storage for recovery purposes [06M01]

a. Stable

b. Flash

c. RAM

d. ROM

76. Once PCM messages are sent the coordinator enters \_\_\_\_\_ state [06M02]

a. Before Commitment

b. After Commitment

c. No commitment

d. Any Commitment

77. The \_\_\_\_\_ protocol requires accessing remote recovery information [06M03]

a. Blocking

b. Restart

c. Termination

d. Pending

78. The probability of having to access remote recovery information is higher in \_\_\_\_\_ Phase commitment protocol [06M04]

a. 1

b. 2

c. 3

d. 4

79. A Commitment protocol is in \_\_\_\_\_ state if the failures forces some of the participating sites to wait until the failure is repaired [06S01]

a. Blocking

b. Suspended

c. Termination

d. Pending

80. A transaction which cannot be terminated at a site is called [06S02]

a. Blocking

b. Suspended

c. Termination

d. Pending

81. The 3-phase commitment protocol contain \_\_\_\_\_ phases for committing a transaction [06S03]

a. 1

b. 2

c. 3

d. 4

82. \_\_\_\_\_ of a transaction in a participant group is therefore a specular problem to independent recovery from a site failure [06S04]

a. Blocking

b. Restart

c. Termination

d. Pending

83. The \_\_\_\_\_ Phase commitment protocol has achieved the nonblocking property at the risk of catastrophe failures in case of partitions [06S05]

a. 1

b. 2

c. 3

d. 4

84. \_\_\_\_\_ protocols use a weighted majority [06S06]

a. Quorum based

b. Quality based

c. Quantity based

d. Either quality or quantity based

85. The weights which are assigned to the sites are called \_\_\_\_\_ [06S07]

a. Votes

b. Polls

c. Nodes

d. root

86. A site in \_\_\_\_\_ state declares that it an move in any direction [06S08]  
a. Ready  
b. Restart  
c. Termination  
d. Pending
87. The high increase in availability is obtained at the risk of \_\_\_\_\_ [07D01]  
a. catastrophic partitions  
b. Network partitions  
c. Internal Partition  
d. External partition
88. For each transaction occurred at site I having x in the read set \_\_\_\_\_ lock message and \_\_\_\_\_ data message are saved [07D02]  
a. 1,1  
b. 1,2  
c. 2,1  
d. 2,2
89. \_\_\_\_\_ are produced which are to be applied to the database when the failure is repaired [07M01]  
a. Deferred Updates  
b. Referred Updates  
c. Confirmed Updates  
d. No Updates
90. \_\_\_\_\_ increases the availability and reliability of the system [07M02]  
a. Redundant databases  
b. Non-Redundant databases  
c. Hierarchical databases  
d. Object databases
91. \_\_\_\_\_ Approach adopts the same rules as that of quaram based approach and termination protocols [07M03]  
a. weighted majority approach  
b. write-lock all  
c. read-lock all  
d. Either read or write all locks
92. On the execution of transactions in the presence of failures is due to the need for \_\_\_\_\_ [07S01]  
a. Consistency control  
b. Concurrency control  
c. Access control  
d. No control
93. If 2-Phase locking is used for concurrency control, A transaction tries to lock all data items of read or write set before \_\_\_\_\_ [07S02]  
a. Termination  
b. Initialization  
c. Commitment  
d. Execution
94. Control messages carry control information that are \_\_\_\_\_ [07S03]  
a. Long  
b. Short  
c. Medium  
d. Unavailable
95. Data Messages carry database information which are \_\_\_\_\_ [07S04]  
a. Long  
b. Short  
c. Medium  
d. unavailable
96. The availability of update transactions is greater with the \_\_\_\_\_ [07S05]  
a. weighted majority approach  
b. write-lock all  
c. read-lock all  
d. termination protocol
97. If the I AM UP message from the \_\_\_\_\_ does not arrive in time then the controller assumes that controlled site has failed [08D01]  
a. Predecessor  
b. Successor  
c. Both predecessor and Successor  
d. Neither predecessor nor Successor
98. For each copy \_\_\_\_\_ and \_\_\_\_\_ are maintainedA) [08D02]



- a. Original Version Number and Previous version number
  - b. Original Version Number and Current version number
  - c. Duplicate Version Number and Current version number
  - d. Duplicate Version Number and Next version number
99. A previous consistent state is marked by \_\_\_\_\_ [08D03]
- a. Cold Restart
  - b. Hot Restart
  - c. Checkpoint
  - d. Either hot or cold restart
100. \_\_\_\_\_ is expensive way to record global checkpoints [08D04]
- a. loosely Asynchronized checkpoints
  - b. Tightly synchronized checkpoints
  - c. Loosely synchronized checkpoints
  - d. Tightly a synchronized checkpoints
101. For each transaction T, C contain the updates performed by all subtransactions of T at any site or it does not contain any of them belongs to the property of \_\_\_\_\_ [08G01]
- a. Atomicity of Transactions
  - b. Availability of Transactions
  - c. Consistencies of Transactions
  - d. -
102. If a transaction T is contained in C , then all conflicting transactions which have preceded T in the serialization order are also contained in C belong to the property of \_\_\_\_\_ [08G02]
- a. Atomicity of Transactions
  - b. Availability of Transactions
  - c. Consistencies of Transactions
  - d. -
103. Requesting site in the network is treated as \_\_\_\_\_ [08M01]
- a. Controlled
  - b. Controller
  - c. No control
  - d. Controlling
104. Sending \_\_\_\_\_ message periodically avoids one message at the expense of having timers in both controller and controlled site [08M02]
- a. WHO AM I
  - b. HOW ARE U
  - c. I-AM-UP
  - d. ARE-U-LIVE
105. Entry of each site is made in \_\_\_\_\_ table [08S01]
- a. State
  - b. Symbol
  - c. Data
  - d. Time
106. Any program can set a \_\_\_\_\_ on any site so that it receives an interrupt when the site changes state [08S02]
- a. Watch
  - b. Control
  - c. Read
  - d. Write
107. The correct approach to the detection of inconsistencies can be based on \_\_\_\_\_ Number [08S03]
- a. Version
  - b. Control
  - c. Unit
  - d. Data
108. \_\_\_\_\_ is required after catastrophic failure [08S04]
- a. Cold restart
  - b. Hot restart
  - c. NO Restart
  - d. Either hot or cold restart
109. To reconstruct a global consistent state in a distributed database is to use \_\_\_\_dumps, \_\_\_\_log, \_\_\_\_Checkpoints [08S05]
- a. Local, Local, Local
  - b. Local, Global, Global
  - c. Local, Local, Global
  - d. Global, Local, Local
110. A \_\_\_\_\_ is a set of local checkpoints [08S06]
- a. Local dumps

- b. Logal Logs
  - c. **Global Checkpoints**
  - d. Either Local Dumps or Logs
111. The recovery procedure take the responsibility of reconstructing a consistent global state at cold restart to avoid building \_\_\_\_\_ [08S07]
- a. Local dumps
  - b. Logal Logs
  - c. **Global Checkpoints**
  - d. Either Local Dumps or Logs
112. \_\_\_\_\_ of distributed databases store all the information which is useful to the system for accessing data correctly and efficiently and for verifying that users have the appropriate access rights to them [09D01]
- a. **Catalogs**
  - b. Logs
  - c. Tables
  - d. Either Log or Table
113. In which of the following applications data referenced by applications are mapped to physical data [09D02]
- a. **Translating**
  - b. Optimizing
  - c. Executing
  - d. Fragmentation
114. In which of the following application data allocation access methods available at each site and statistical information are required to produce access plan [09D03]
- a. Translating
  - b. **Optimizing**
  - c. Executing
  - d. Fragmentation
115. In which of the following application catalog information is used to verify the access plan are valid and that the users have the appropriate access rights [09D04]
- a. Translating
  - b. Optimizing
  - c. **Executing**
  - d. Fragmentation
116. \_\_\_\_\_ are short hand names of system wide names [09D05]
- a. **Print names**
  - b. Scan names
  - c. Object name
  - d. Class name
117. In a distributed system \_\_\_\_\_ include the description of fragmentation and allocation of data and the mapping of local names [09M01]
- a. **Catalogs**
  - b. Logs
  - c. Tables
  - d. Either Log or Table
118. Catalogs are updated when the user modify \_\_\_\_\_ definition [09M02]
- a. Control
  - b. **Data**
  - c. Method
  - d. Either Data or Method
119. Which of the following content of the catalog include the name of global relations and of attributes [09M03]
- a. **Global Schema Description**
  - b. Fragmentation Description
  - c. Allocation Description
  - d. Access method Description
120. \_\_\_\_\_ fragmentation Includes the qualification of fragments [09M04]
- a. **Horizontal**
  - b. Vertical
  - c. Mixed
  - d. Either Horizontal or vertical e
121. \_\_\_\_\_ fragmentation includes the attributes which belongs to the fragments [09M05]
- a. Horizontal
  - b. **Vertical**
  - c. Mixed
  - d. Either Horizontal or vertical

122. \_\_\_\_\_ Fragmentation includes the both the fragmentation tree and the description of the fragmentation corresponding to each nonleaf node of the tree [09M06]
- Horizontal
  - Vertical
  - Mixed
  - Either Horizontal or vertical
123. Content and Management of \_\_\_\_\_ designate the information which is required by the system for accessing the database [09S01]
- Catalogs
  - Logs
  - Tables
  - Either Log or Table
124. \_\_\_\_\_ gives the mapping between fragments and physical storage [09S02]
- Global Schema Description
  - Fragmentation Description
  - Allocation Description
  - Access method Description
125. \_\_\_\_\_ describes the access methods which are locally available at each site [09S03]
- Global Schema Description
  - Fragmentation Description
  - Allocation Description
  - Access method Description
126. \_\_\_\_\_ is used for binding the names of physical images to the names of the local data stores at each site [09S04]
- Global Schema Description
  - Fragmentation Description
  - Allocation Description
  - Mapping to Local Names
127. \_\_\_\_\_ field includes the profiles of database [09S05]
- Global Schema Description
  - Statistics on Databases
  - Allocation Description
  - Access method Description
128. \_\_\_\_\_ Includes the information about the users authorization to access the databases , or integrity constraints on the allowed values of data [09S06]
- Global Schema Description
  - Statistics on Databases
  - Consistency Information
  - Access method Description
129. When catalogs are used for translation, optimization and execution of application their information is \_\_\_\_\_ [09S07]
- Updated
  - Retrieved
  - Inserted
  - deleted
130. When catalogs are used in conjunction with a change in data definition they are \_\_\_\_\_ [09S08]
- Updated
  - Retrieved
  - Inserted
  - Deleted
131. Which of the following catalogs are stored at one site [09S09]
- Centralized catalogs
  - Fully replicated catalog
  - Local catalog
  - Fully non-replicated catalog
132. Which of the following catalogs are replicated at each site [09S10]
- Centralized catalogs
  - Fully replicated catalog
  - Local catalog
  - Fully non-replicated catalog
133. Which of the following catalogs are fragmented and allocated in such a way that they are stored at the same site as the data to which they refer [09S11]
- Centralized catalogs
  - Fully replicated catalogs
  - Local catalog
  - Fully non-replicated catalog

134. \_\_\_\_ Allows authorization to be checked either at the beginning of the compilation or at the beginning of the execution [10D01]
- a. Partial Replication of Authorization Rules
  - b. Fully Replication of authorization Rules
  - c. Non Replication of Authorization Rules
  - d. Fully replication of Protection rules
135. The \_\_\_\_ given to the users of the centralized databases includes the abilities of reading, inserting, creating and deleting object instances [10D02]
- a. Protection
  - b. Authorization
  - c. Security
  - d. Both Protection and security
136. In \_\_\_\_ database additional privilege of moving the object from one site to another is added [10D03]
- a. Centralized
  - b. Distributed
  - c. Network
  - d. Object
137. Transmission of content between identified sites [10M01]
- a. Protect the content
  - b. Delete the content
  - c. Insert the content
  - d. Steal away the content
138. \_\_\_\_ facility is used to allow users at remote site to connect their terminals to their home sites in order to identify themselves Pass through or pass by Neither pass through nor pass by A [10M02]
- a. Pass through
  - b. Pass by
  - c. Either Pass through or pass by
  - d. Neither pass through nor pass by
139. \_\_\_\_ can be identified by establishing an identification protocol between remote sites [10S01]
- a. Viruses
  - b. Worm
  - c. Intruder
  - d. Trojan Horse
140. Rules used for \_\_\_\_ are referred as key of cryptographic system [10S03]
- a. Encoding
  - b. Decoding
  - c. Both Encoding and Decoding
  - d. Neither Encoding Nor decoding
141. Site-Site cryptography requires the sender and the receiver of the transmission to agree on its [10S04]
- a. Plain Text
  - b. Key
  - c. Chipper Text
  - d. Lock
142. \_\_\_\_ classification is one which is induced by the distribution of database to different sites [10S05]
- a. Natural
  - b. Artificial
  - c. Absolute
  - d. Both Artificial and Absolute
143. \_\_\_\_ Algorithms prevents the access to stale cache data, by ensuring that clients cannot update an object if it is being read by another client [11D01]
- a. AvoidanceBased
  - b. Detection Based
  - c. Both Avoidance Based and Detection Based
  - d. Neither avoidance Based nor Detection Based
144. In \_\_\_\_ algorithms, the client sends a lock escalation message at the time it wants to perform a write operation and it blocks until the server responds [11D02]
- a. Synchronous
  - b. Asynchronous
  - c. Deferred
  - d. Consistency
145. In \_\_\_\_ algorithms, the client sends a lock escalation message at the time it wants to perform a write operation and it does not block waiting for a server response [11D03]

- a. Synchronous
  - b. Asynchronous**
  - c. Deferred
  - d. Consistency
146. In \_\_\_\_\_ algorithms the clients optimistically defers informing the server about its write operation until commit time [11D04]
- a. Synchronous
  - b. Asynchronous**
  - c. Deferred
  - d. Consistency
147. \_\_\_\_\_ is the synchronous avoidance based cache consistency algorithm [11D05]
- a. Callback-Read Locking**
  - b. Optimistic two phase locking
  - c. Caching two phase locking
  - d. No wait Locking
148. In \_\_\_\_\_ algorithms , the clients retain read locks across the transaction , but they relinquishes write locks at the end of transaction [11D06]
- a. Callback-Read Locking**
  - b. Optimistic two phase locking
  - c. Caching two phase locking
  - d. No wait Locking
149. \_\_\_\_\_ family of cache consistency are deferred avoidance based algorithm [11D07]
- a. Callback-Read Locking
  - b. Optimistic two phase locking**
  - c. Caching two phase locking
  - d. No wait Locking
150. \_\_\_\_\_ algorithms are susceptible to higher Deadlocks [11D08]
- a. Callback-Read Locking
  - b. Optimistic two phase lockingB**
  - c. Caching two phase locking
  - d. No wait Locking
151. \_\_\_\_\_ is used as a unit of communication between the clients and server [11G01]
- a. Page
  - b. Object
  - c. Group of objects
  - d. -
152. The distinction between object servers and page servers is based on \_\_\_\_\_ of data [11G02]
- a. Meaning
  - b. Segmentation
  - c. Granularity**
  - d. -
153. The server marks the pages that also exist in the client caches as \_\_\_\_\_ [11G03]
- a. Hated
  - b. Hide
  - c. Hit
  - d. -
154. Navigation of composite object structures by the application program may dictate that data to be moved to the clients Which is referred as [11M01]
- a. Data shifting systems
  - b. Data shipping systems**
  - c. Data segment systems
  - d. Data varying systems
155. Replication of \_\_\_\_\_ in client and servers enables the methods to be executed at both the client and server [11M02]
- a. Object Interface
  - b. Object Managers**
  - c. Object Database
  - d. Class managers
156. \_\_\_\_\_ at client and server implement object cache [11M03]
- a. Object Interface
  - b. Object Managers**
  - c. Object Database
  - d. Class managers
157. \_\_\_\_\_ Simplify the DBMS code [11M04]
- a. Object Servers
  - b. Data servers**

- c. Page servers
  - d. File servers
158. Data buffers are managed using a variation in \_\_\_\_\_ policy [11M05]
- a. Least Recently Used
  - b. Least Frequently Used
  - c. First in First Out
  - d. Last in Last Out
159. Log buffer uses \_\_\_\_\_ buffer replacement policy [11M06]
- a. Least Recently Used
  - b. Least Frequently Used
  - c. First in First Out
  - d. Last in Last Out
160. To minimize the duplications of data in clients and server ,the \_\_\_\_\_ buffer replacement policy is used by the server [11M07]
- a. Least Recently Used
  - b. Least Recently Used with hated hints
  - c. First in First Out
  - d. Last in Last Out
161. Relational client server system is referred as \_\_\_\_\_ [11S01]
- a. Function Shipping
  - b. Function Shifting
  - c. Procedure Shifting
  - d. Procedure Shipping
162. Client cache buffer management is closely related to \_\_\_\_\_ [11S02]
- a. Concurrency control
  - b. Consistency control
  - c. Synchronization control
  - d. Asynchronization Control
163. Which of the following servers retrieves objects from the database and returns them to the requesting client? [11S03]
- a. Object Servers
  - b. Data servers
  - c. Page servers
  - d. File servers
164. \_\_\_\_\_ are referred as home page [11S04]
- a. Data pages
  - b. Disk page
  - c. Object pages
  - d. Class pages
165. RPC stands for [11S05]
- a. Remote procedure call
  - b. Remote processing call
  - c. Random procedure call
  - d. Random processing call
166. The work distribution between client and server is determined by \_\_\_\_\_ [11S06]
- a. Query Processor
  - b. Query Optimizer
  - c. Query Interface
  - d. Query Manager
167. \_\_\_\_\_ manage access at a finer granularity and can achieve high level of concurrency [11S07]
- a. Object Interface
  - b. Object Buffer
  - c. Object Manager
  - d. Object Browser
168. Buffer utilization of page buffer \_\_\_\_\_ Buffer utilization of object buffer [11S08]
- a. Lower than
  - b. Greater than
  - c. Equals to
  - d. Inequality to
169. Retaining of pages and objects by the client buffer managers across the transaction boundaries is referred to as \_\_\_\_\_ [11S09]
- a. Inter Transaction Caching
  - b. Intra Transaction Caching
  - c. Inter Transaction Recovery
  - d. Intra Transaction Recovery
170. In data caching systems \_\_\_\_\_ is used as a performance enhancing optimization [11S10]

- a. Transaction caching of data
  - b. Intra Transaction Caching of data
  - c. Locks
  - d. **Both Inter Transaction caching of data and Locks**
171. \_\_\_\_\_ is the synchronous detection based cache consistency algorithm [11S11]
- a. Callback-Read Locking
  - b. Optimistic two phase locking
  - c. **Caching two phase locking**
  - d. No wait Locking
172. \_\_\_\_\_ with notification is an asynchronous detection based cache consistency algorithm [11S12]
- a. Callback-Read Locking
  - b. Optimistic two phase locking
  - c. Caching two phase locking
  - d. **No wait Locking**
173. \_\_\_\_\_ is deferred detection based algorithm [11S13]
- a. Callback-Read Locking
  - b. Optimistic two phase locking
  - c. **Adaptive optimistic concurrency control**
  - d. No wait Locking
174. \_\_\_\_\_ stores object that have been updated and returned by the clients [11S14]
- a. Message object buffer
  - b. **Modified object buffer**
  - c. Message operating buffer
  - d. Modified oriented buffer
175. \_\_\_\_\_ is the most efficient approach [12D01]
- a. Class Identifier
  - b. Object Identifier
  - c. Logical Identifier
  - d. **Physical Identifier**
176. \_\_\_\_\_ approach is promoted by Object Oriented Programming [12D02]
- a. Class Identifier
  - b. Object Identifier
  - c. **Logical Identifier**
  - d. Physical Identifier
177. Indirection table associates \_\_\_\_\_ ,called as object oriented pointer [12D03]
- a. Class Identifier
  - b. Object Identifier
  - c. **Logical Identifier**
  - d. Physical Identifier
178. If \_\_\_\_\_ are used , the mapping information needs to be present at server only [12D04]
- a. LOID-to-POID
  - b. **Pseudo LOID**
  - c. Pseudo POID
  - d. POID-to-LOID
179. LOID-to-POID information is stored in \_\_\_\_\_ [12D05]
- a. Hash tables
  - b. B+ Trees
  - c. **Either Hash tables or B+ Trees**
  - d. Neither B+ Trees nor Hash Tables
180. Object DBMS can navigate from one object to another using \_\_\_\_\_ [12G01]
- a. **path expressions**
  - b. path variation
  - c. path selection
  - d. -
181. Object Migration involves [12G02]
- a. Shipping the object from the source to the destination
  - b. Creating a proxy at the source
  - c. Replacing the original object
  - d. -
182. \_\_\_\_\_ approach equates the Object identifier with the physical address of the corresponding identifie [12M01]
- a. Class Identifier
  - b. Object Identifier
  - c. Logical Identifier
  - d. **Physical Identifier**

183. \_\_\_\_\_ approach consists of allocating a system wide unique object identifier [12M02]
- Class Identifier
  - Object Identifier
  - Logical Identifier**
  - Physical Identifier
184. In \_\_\_\_\_ Schemes the operating system page fault mechanism is used for pointer Swizzling [12M03]
- Hardware based
  - Software Based
  - Either Hardware or Software Based
  - Neither Hardware nor Software Based
185. In \_\_\_\_\_ Schemes an object table is used for pointer Swizzling [12M04]
- Hardware based
  - Software Based**
  - Either Hardware or Software Based
  - Neither Hardware nor Software Based
186. \_\_\_\_\_ are uniquely used to identify every object [12S01]
- Class Identifier
  - Object Identifier**
  - Logical Identifier
  - Physical Identifier
187. \_\_\_\_\_ is the logical representation of the disk location of the object [12S02]
- Serial Number
  - Sequential Number**
  - Page Number
  - Line Number
188. The process of converting a disk version of the pointer o an in-memory version of a pointer is known as \_\_\_\_\_ [12S03]
- Pointer-Swizzling**
  - Pointer Basics
  - Pointer Shifting
  - Pointer Conversion
189. In \_\_\_\_\_ state objects are ready to be invoked to receive a message [12S04]
- Ready**
  - Active
  - Waiting
  - Suspended
190. In \_\_\_\_\_ state objects are currently involved in an activity in response to an invocation or a message [12S05]
- Ready
  - Active**
  - Waiting
  - Suspended
191. In \_\_\_\_\_ state objects have invoked another object and are waiting for a response [12S06]
- Ready
  - Active
  - Waiting**
  - Suspended
192. In \_\_\_\_\_ state objects are temporarily unavailable for invocation [12S07]
- Ready
  - Active
  - Waiting
  - Suspended**
193. Objects in \_\_\_\_\_ state are not allowed for migration [12S08]
- Ready or active
  - Active or Waiting**
  - Waiting or Suspended
  - Suspended or Ready
194. Movement of Composite objects is done using a method called \_\_\_\_\_ [12S09]
- Object Assembly**
  - Object Identifier
  - Object Identifier
  - Object Interface
195. \_\_\_\_\_ is the first phase of tracing based algorithms [13D01]
- Mark**
  - Sweep



- c. Both Mark and Seep
  - d. Neither Mark nor Sweep
196. Which phase is also called a "color" [13D02]
- a. Mark
  - b. Sweep
  - c. Both Mark and Seep
  - d. Neither Mark nor Sweep
197. In which of the following phase, memory is examined and unmarked objects are reclaimed [13D03]
- a. Mark
  - b. Sweep
  - c. Both Mark and Seep
  - d. Neither Mark nor Sweep
198. \_\_\_\_\_ collectors must address problems raised by concurrency [13D04]
- a. Type Based
  - b. Copy Based
  - c. Both Type based and Copy Based
  - d. Incremental
199. For \_\_\_\_\_ Reasons a garbage collector for a distributed system combines independent per-site collectors with a global inter-site collectors [13D05]
- a. Scalability
  - b. Efficiency
  - c. Both Efficiency and Scalability
  - d. Neither Efficiency nor Scalability
200. \_\_\_\_\_ problem arises in object databases [13M01]
- a. Garbage collection
  - b. No Garbage Collection
  - c. Availability of space
  - d. Non Availability of space
201. The mapping of conceptual model to a physical storage is a \_\_\_\_\_ problem [13M02]
- a. Relational Database
  - b. Object Database
  - c. Classical Database
  - d. Hierarchal Database
202. In \_\_\_\_\_ , there is no need for garbage collection [13M04]
- a. Relational Database
  - b. Object Database
  - c. Classical Database
  - d. Hierarchal Database
203. \_\_\_\_\_ collectors divide memory into two disjoint areas called from space and to-space [13M05]
- a. Type Based
  - b. Copy Based
  - c. Both Type based and Copy Based
  - d. Neither Type based nor copy based
204. \_\_\_\_\_ OIDs yield more efficient direct object access, but require each object to contain inherited attributes [13S01]
- a. Physical
  - b. Logical
  - c. Page
  - d. Segment
205. \_\_\_\_\_ models partitions each object class in binary relation [13S02]
- a. Decomposition Storage
  - b. Normalized storage
  - c. Direct storage
  - d. Indirect storage
206. \_\_\_\_\_ models stores each class as a separate relation [13S03]
- a. Decomposition Storage
  - b. Normalized storage
  - c. Direct storage
  - d. Indirect storage
207. \_\_\_\_\_ models enables multi-class clustering of complex objects based on composition relationship [13S04]
- a. Decomposition Storage
  - b. Normalized storage
  - c. Direct storage

d. Indirect storage

208. In \_\_\_\_\_ counting system, each object has an associated count of references to it [13S05]

- a. Serial
- b. Sequential
- c. Random
- d. Reference

209. Programs manipulate \_\_\_\_\_ objects while \_\_\_\_\_ objects are left empty [13S06]

- a. From Space, To Space
- b. From Space, From Space
- c. To Space, To Space
- d. To space, From Space

210. Preserving the response time of user applications requires the use of \_\_\_\_\_ techniques [13S07]

- a. Incremental
- b. Decremental
- c. Both Incremental and decremental
- d. Neither Incremental Nor Decremental

211. \_\_\_\_\_ counting cannot collect unreachable cycles of garbage objects [13S08]

- a. Serial
- b. Sequential
- c. Random
- d. Reference

212. \_\_\_\_\_ counting is defeated by common message failures [13S09]

- a. Serial
- b. Sequential
- c. Random
- d. Reference

213. A variant of a reference counting collection scheme is called as \_\_\_\_\_ [13S10]

- a. Reference Stack
- b. reference Listing
- c. Reference Linking
- d. Reference coding

214. A \_\_\_\_\_ type is defined as a subtype of function type [14D01]

- a. Parameter
- b. Arguments
- c. Query
- d. Object

215. If number of joins in a query exceeds \_\_\_\_\_, enumerative search strategies become infeasible [14D02]

- a. 5
- b. 7
- c. 9
- d. 10

216. Parametric query optimization is also called as \_\_\_\_\_ [14D03]

- a. Dynamic plan projection
- b. Dynamic plan Selection
- c. Static plan projection
- d. Static plan Selection

217. \_\_\_\_\_ allows queries whose predicate involves conditions on object access along reference chains [14D04]

- a. Structured Query Language
- b. Object Query Language
- c. Sybase
- d. Relational Query Language

218. Reference chains are called \_\_\_\_\_ [14D05]

- a. Path Variants
- b. Path Selectors
- c. Path Expressions
- d. Path Indicator

219. \_\_\_\_\_ Operator is used to indicate the optimizer where path expressions are used and where algebraic transformations can be applied [14D06]

- a. Addition
- b. Materialize
- c. Multiplication
- d. Division

220. Volcano optimizer generator uses a top down dynamic programming approach to search with

\_\_\_\_\_ pruning [14G01]

- a. Min-Max
- b. Alpha-Beta
- c. Branch and Bound
- d. -

221. \_\_\_\_\_ are called enumerative algorithms [14G02]

- a. Min-Max
- b. Alpha-Beta
- c. Branch and Bound
- d. -

222. \_\_\_\_\_ algorithms take multiple collections of objects as inputs and produce aggregate objects related to some criteria [14G03]

- a. Collection Scan
- b. Collection Index
- c. Set Matching
- d. -

223. Relational queries are defined on \_\_\_\_\_ relationship [14M01]

- a. Composition
- b. Flat
- c. Ternary
- d. No Relation

224. Object queries are defined on \_\_\_\_\_ relationship [14M02]

- a. Composition
- b. Flat
- c. Ternary
- d. No Relation

225. In \_\_\_\_\_ approach new expressions are constructed bottom up using the previously determined optimal sub expressions [14M03]

- a. Divide and conquer
- b. Backtracking
- c. Greedy method
- d. Dynamic Programming

226. The query model is based on \_\_\_\_\_ mode [14S01]

- a. Object
- b. Class
- c. Segment
- d. Page

227. \_\_\_\_\_ Query languages operate on very simple type systems containing of a single type relation [14S02]

- a. Structured Query Language
- b. Relational Query Language
- c. Sybase
- d. Object Query Language

228. \_\_\_\_\_ Query optimization depends on physical storage of data [14S04]

- a. Relational
- b. Object
- c. Structured
- d. Normal

229. \_\_\_\_\_ raises issues related to the accessibility of storage information by the query optimizer [14S05]

- a. Encapsulation
- b. Inheritance
- c. Polymorphism
- d. Abstraction

230. Accessing each complex object involves \_\_\_\_\_ [14S06]

- a. Path expressions
- b. Path Identification
- c. Path Coverage
- d. Path Selected

231. Query optimization problem is modeled as optimization problem whose solution is the choice based on \_\_\_\_\_ of the optimum state [14S07]

- a. Cost Function
- b. Time
- c. Both cost function and time
- d. Neither cost function nor time

232. \_\_\_\_\_ query optimizer provide some amount of extensibility by allowing the definition of new

transformation rules [14S08]

- a. Object Based
- b. Class Based
- c. **Rule Based**
- d. Classical

233. \_\_\_\_\_ module is an example of the intra module extensibility in open object oriented databases [14S09]

- a. Client
- b. Server
- c. **Query**
- d. Storage

234. \_\_\_\_\_ is a subcomponent of query module [14S10]

- a. Code Optimization
- b. Code Modification
- c. Code Deletion
- d. **Code Generation**

235. The \_\_\_\_\_ requires the transaction manager to take into account schema evolution concerns [15D01]

- a. **Class Lattice**
- b. Object Lattice
- c. Read Lattice
- d. Write Lattice

236. \_\_\_\_\_ synchronization protocols can be derived which maintain the compatibility of synchronization decisions at each object [15D02]

- a. Inter Object
- b. **Intra Object**
- c. Intra Class
- d. Inter Class

237. \_\_\_\_\_ mode prevents another transaction from updating the instances [15D03]

- a. **S-Mode**
- b. X-Mode
- c. IS-Mode
- d. IX-Mode

238. Class definition is locked in \_\_\_\_\_ mode, and the instances are locked in X mode [15D04]

- a. S-Mode
- b. **X-Mode**
- c. IS-Mode
- d. IX-Mode

239. Class definition is locked in \_\_\_\_\_ mode, and the instances are locked in S mode as necessary [15D05]

- a. S-Mode
- b. X-Mode
- c. **IS-Mode**
- d. IX-Mode

240. Class definition is locked in \_\_\_\_\_ mode, and the instances are locked in X mode or s mode necessary [15D06]

- a. S-Mode
- b. X-Mode
- c. IS-Mode
- d. **IX-Mode**

241. In \_\_\_\_\_ mode class definition is locked in s mode, and all the instances are implicitly locked in s mode. The instances that are to be updated are explicitly locked in X mode [15D07]

- a. S-Mode
- b. X-Mode
- c. IS-Mode
- d. **SIX-Mode**

242. Give two transactions  $T_i$  and  $T_j$  such that  $T_i$  is waiting for  $T_j$ ,  $T_i$  cannot commit its operation on any object until  $T_j$  terminates is \_\_\_\_\_ rule [15D08]

- a. **Ordered Commitment**
- b. Ordered termination
- c. Unordered commitment
- d. Unordered termination

243. \_\_\_\_\_ states that two operations conflict if the results of different serial execution of these operations are not equivalent [15M01]

- a. **Associativity**
- b. Distributivity

- c. Closure
- d. Commutativity
- 244. \_\_\_\_\_ represents a correct history for the set object and is determined according to its semantics [15M02]
  - a. Log
  - b. Legal History
  - c. File History
  - d. Serializable History
- 245. \_\_\_\_\_ involves the sharing of behavior and/or state among objects [15M03]
  - a. subtyping
  - b. Inheritance
  - c. Either Subtyping or Inheritance
  - d. Neither Subtyping nor Inheritance
- 246. \_\_\_\_\_ graph requires methods for dealing with the synchronization of accesses to objects which have other objects as components [15M04]
  - a. Euler
  - b. Aggregation
  - c. Composite
  - d. Bi Connected
- 247. \_\_\_\_\_ tables are defined for method and attribute operations [15M05]
  - a. Closure
  - b. Associativity
  - c. Commutativity
  - d. Distributivity
- 248. \_\_\_\_\_ concurrency control algorithm is based on multigranularity locking , enforce serializability [15M06]
  - a. Onion
  - b. Orion
  - c. Olion
  - d. Orient
- 249. \_\_\_\_\_ is a set of pairs (v,a) where v is an vertex and a is an operation affecting v and can be one of insert, delete, examine, modify [15M07]
  - a. Read Set
  - b. Edge set
  - c. Write set
  - d. Vertex set
- 250. \_\_\_\_\_ Managers synchronize simple read and write operations [15S01]
  - a. Recovery
  - b. Conventional Transaction
  - c. Optimization
  - d. Code Generation
- 251. \_\_\_\_\_ access flat objects [15S02]
  - a. Recovery
  - b. Conventional Transaction
  - c. Optimization
  - d. Code Generation
- 252. \_\_\_\_\_ table is called compatibility matrix [15S03]
  - a. Symbol
  - b. Lexical
  - c. Syntactic
  - d. Conflict
- 253. For every state s in which P and Q are both defined,  $P(Q(s))=Q(P(s))$  and  $P(Q(s))$  is defined is called [15S04]
  - a. Forward Commutativity
  - b. Backward Commutativity
  - c. Forward Associativity
  - d. Backward Associativity
- 254. For every state s in which we know that  $P(Q(s))$  is defined ,  $P(Q(s))=Q(P(s))$  is called [15S05]
  - a. Forward Commutativity
  - b. Backward Commutativity
  - c. Forward Associativity
  - d. Backward Associativity
- 255. \_\_\_\_\_ defines a conflict between two operations no on the basis of whether they commute or not, but according to whether or not the execution of one invalidates the other [15S06]
  - a. Indirection
  - b. Invariant

c. Invalidation

d. Intersection

256. An operation p is said to be \_\_\_\_ with respect to operation Q if value returned by P is independent of whether Q executed before P or not [15S07]

a. Commutative

b. Associative

c. Recoverable

d. Closure

257. Running a transaction against a composite object may actually spawn additional transactions on its component objects. This forces an \_\_\_\_\_ [15S08]

a. Implicit nesting

b. Explicit nesting

c. No Nesting

d. Both Implicit and Explicit nesting

258. \_\_\_\_ operation is an atomic operation that affects the object variables [15S09]

a. Local

b. Global

c. Both global and Local

d. Neither global nor Local

259. A method execution on an object consist of \_\_\_\_ steps [15S10]

a. Local

b. Global

c. Both global and Local

d. Neither global nor Local

260. \_\_\_\_ locking is that a transaction that locks at a coarse granularity implicitly locks all the corresponding objects of finer granularities [15S11]

a. Multigranularity

b. Coarse granularity

c. Finer Granularity

d. Single granularity

261. \_\_\_\_ method is used to execute m [15S12]

a. rep(m)

b. use(m)

c. add(m)

d. del(m)

262. Transactions observe strict \_\_\_\_\_ phase locking rule and hold on to their locks until termination [15S13]

a. 1

b. 2

c. 4

d. 3

263. The termination of a transaction in nested 2PL waits the termination of its \_\_\_\_ [15S14]

a. Parent

b. Children

c. Both Parent and children

d. Neither Parent nor children

264. \_\_\_\_ is a set of pairs (e,a) where e is an edge and a is an operation affecting e and can be one of insert, delete, examine [15S15]

a. Read Set

b. Edge set

c. Write set

d. Vertex set

265. \_\_\_\_\_ integration mechanism integrate more than two schemas at each iteration [16D01]

a. Unary

b. Binary

c. Ternary

d. Nary

266. \_\_\_\_\_ involves the determination of structural and semantic problems of each component database [16D02]

a. Hetrogenization

b. Homogenization

c. Both Homogenization and Hetrogenization

d. Neither Homogenization nor Hetrogenization

267. Integration follows \_\_\_\_\_ and involves merging the schemas of multiple databases to create a global conceptual schema [16D03]

a. Hetrogenization

- b. Homogenization
  - c. Both Homogenization and Hetrogenization
  - d. Neither Homogenization nor Hetrogenization
268. \_\_\_\_\_ follows the translation process and generates the global conceptual schema by integrating the intermediate schemas [16M01]
- a. Schema Updation
  - b. Schema Translation
  - c. Schema Integration
  - d. Schema Deletion
269. \_\_\_\_\_ involves the process by which information from participating database can be conceptually integrated to form a single cohesive definition of a multidatabase [16S01]
- a. Database Isolation
  - b. Database Integration
  - c. Database Updation
  - d. Database Scalability
270. \_\_\_\_\_ is the task of mapping from one schema to another [16S02]
- a. Schema Updation
  - b. Schema Translation
  - c. Schema Integration
  - d. Schema Deletion
271. \_\_\_\_\_ is the process of identifying the components of a database which are related to one another, selecting the best representation for the global conceptual schema, and finally, integrating the components of each intermediate schemas [16S03]
- a. Schema Updation
  - b. Schema Translation
  - c. Schema Integration
  - d. Schema Deletion
272. Two identical entities that have different names are called \_\_\_\_ [16S04]
- a. Synonyms
  - b. Homonyms
  - c. Antonyms
  - d. Meaning
273. Two different entities that have identical names are called \_\_\_\_\_ [16S05]
- a. Synonyms
  - b. Homonyms
  - c. Antonyms
  - d. Meaning
274. \_\_\_\_\_ occur when the same object is represented by an attribute in one schema and by entity in another [16S06]
- a. Class conflict
  - b. Method conflict
  - c. Type conflict
  - d. No Conflict
275. Query optimization in multi-DBMSs can be \_\_\_\_\_ [17D01]
- a. Heuristic based
  - b. Cost Based
  - c. Either Heuristic based or cost Based
  - d. Neither heuristic based nor cost based
276. Cost function for component DBMS is expressed as \_\_\_\_\_ [17D02]
- a.  $\text{cost} = \text{initialization cost} + \text{cost to find qualifying tuples}$
  - b.  $\text{cost} = \text{initialization cost} + \text{cost to find qualifying tuples} + \text{Cost to process selected tuples}$
  - c.  $\text{cost} = \text{initialization cost} + \text{cost to find qualifying tuples} - \text{Cost to process selected tuples}$
  - d.  $\text{cost} = \text{initialization cost} - \text{cost to find qualifying tuples} + \text{Cost to process selected tuples}$
277. The global cost equation is treated as a \_\_\_\_\_ [17D03]
- a. Regression Equation
  - b. Recursive Function
  - c. Enumerable Function
  - d. Composite Equation
278. The \_\_\_\_\_ step involves the reordering of relational algebra operations, as well as determination of best access path to data [17G01]
- a. Decomposition
  - b. Optimization
  - c. Execution
  - d. -
279. The \_\_\_\_\_ step involves the simplification of a user query that is specified in some relational calculus and its translation to an equivalent relational algebra query over conceptual schema

[17G02]

- a. Decomposition
- b. Optimization
- c. Execution
- d. -

280. The site that receives the query and performs the splitting is called \_\_\_\_\_. [17M01]

- a. Control site
- b. Control Unit
- c. Local site
- d. Global site

281. The \_\_\_\_\_ coefficients are cost function parameters [17M02]

- a. Composite
- b. Linear
- c. Regression
- d. Recursive

282. \_\_\_\_\_ means that a component DBMS may terminate its services at any time [17S01]

- a. Communication autonomy
- b. Design autonomy
- c. Execution autonomy
- d. Distributed autonomy

283. \_\_\_\_\_ may restrict the availability and accuracy of statistical information that is needed for query optimization [17S02]

- a. Communication autonomy
- b. Design autonomy
- c. Execution autonomy
- d. Distributed autonomy

284. \_\_\_\_\_ of multidatabase systems makes it difficult to apply some of the query optimization techniques [17S03]

- a. Communication autonomy
- b. Design autonomy
- c. Execution autonomy
- d. Distributed autonomy

285. Each site has a special data item called \_\_\_\_\_. [18D01]

- a. Token
- b. Message
- c. Key
- d. Ticket

286. \_\_\_\_\_ approach address the problem of indirect conflicts by addressing them into direct conflicts [18D02]

- a. Concurrency control
- b. Synchronization
- c. Ticketing
- d. Consistency

287. In \_\_\_\_\_ global transaction management functions are performed independent of component transaction execution function [18M01]

- a. Communication autonomy
- b. Design autonomy
- c. Execution autonomy
- d. Distributed autonomy

288. MDBS architecture involves a number of DBMS each with its own transaction manager called \_\_\_\_\_. [18M02]

- a. Local Transaction Manager
- b. Global Transaction Manager
- c. Both Local and Global Transaction Manager
- d. Neither Local nor global Transaction Manager

289. \_\_\_\_\_ algorithms synchronize concurrent transactions [18M03]

- a. Consistency Algorithms
- b. Concurrency Control Algorithms
- c. Synchronizations Algorithms
- d. Asynchronization Algorithms

290. The transaction manager of multi-DBMS layer is called \_\_\_\_\_. [18S01]

- a. Local Transaction Manager
- b. Global Transaction Manager
- c. Both Local and Global Transaction Manager
- d. Neither Local nor global Transaction Manager

291. In Multidatabase system \_\_\_\_\_ transactions are submitted to each DBMS [18S02]



- a. Local
  - b. Global
  - c. Both Local and Global
  - d. Neither Local nor global
292. \_\_\_\_\_ transactions are submitted to multi-DBMS layer [18S03]
- a. Local
  - b. Global
  - c. Both Local and Global
  - d. Neither Local nor global
293. \_\_\_\_\_ transactions are divided into a set of global subtransactions , each of which executes on one database [18S04]
- a. Local
  - b. Global
  - c. Both Local and Global
  - d. Neither Local nor global
294. In Distributed Multi-DBMS \_\_\_\_\_ is responsible for the coordination of distributed execution of global transactions [18S05]
- a. Local Transaction Manager
  - b. Global Transaction Manager
  - c. Both Local and Global Transaction Manager
  - d. Neither Local nor global Transaction Manager
295. Communication through stubs and skeletons is known as \_\_\_\_\_ [19D01]
- a. Dynamic Invocation
  - b. Static Invocation
  - c. Direct Invocation
  - d. Indirect Invocation
296. Brokering involves \_\_\_\_\_ [19G01]
- a. Target Object Location
  - b. Message delivery
  - c. Method Binding
  - d. -
297. \_\_\_\_\_ encapsulate the data sources and provide a completely uniform interface to the outside worlds [19M01]
- a. Wrapper
  - b. Rapper
  - c. Lapper
  - d. Mapper
298. The \_\_\_\_\_ directs requests and responses between objects [19M02]
- a. COBRA
  - b. CORBA
  - c. COBAR
  - d. COBAR
299. \_\_\_\_\_ is the key communication mechanism of Object request Broker [19M03]
- a. COBRA
  - b. CORBA
  - c. COBAR
  - d. COBAR
300. A set of \_\_\_\_\_ are the basic functions required for object management [19S01]
- a. Common object services
  - b. Common object request
  - c. Common object response
  - d. Common object repair
301. \_\_\_\_\_ is a abstraction with a state and a set of operations [19S02]
- a. Object
  - b. Operand
  - c. Class
  - d. Method
302. The Interfaces are defined by means of \_\_\_\_\_ [19S03]
- a. Interface query Language
  - b. Interface definition Language
  - c. Interface request language
  - d. Interface response language
303. IDL compiler generates client side \_\_\_\_\_ and server side \_\_\_\_\_ [19S04]
- a. Stubs, Stubs
  - b. Skeleton, Skeleton
  - c. Skeleton, S tub

d. Stubs , Skeleton

304. A \_\_\_\_\_ object is one which support one or more interface as defined by its class [19S05]

a. COM

b. OLE

c. Either COM or OLE

d. Neither COM nor OLE

305. \_\_\_\_\_ algorithm for page replacement is one which determines the page with the smallest ratio between its probability of access and its frequency of broadcast [20D01]

a. PIX

b. CIX

c. SIX

d. DIX

306. \_\_\_\_\_ is an idealized algorithm [20D02]

a. PIX

b. CIX

c. SIX

d. DIX

307. An Implementable approximation is called \_\_\_\_\_ [20D03]

a. LIX

b. CIX

c. SIX

d. DIX

308. Pages that are more in demand are called \_\_\_\_\_pages [20M01]

a. Cold

b. Hot

c. Dirty

d. Preferable

309. Pages that are less in demand are called \_\_\_\_\_pages [20M02]

a. Cold

b. Hot

c. Dirty

d. Preferable

310. Push based approach to \_\_\_\_\_ and discrimination is a response to some of the problem inherit in push based systems [20S01]

a. Data delivery

b. Object delivery

c. Method delivery

d. Class delivery

311. \_\_\_\_\_ raises as a problem in push based systems [20S02]

a. Delivery Schedule Generation

b. Delivery Schedule Optimization

c. Delivery Schedule Execution

d. Delivery Schedule termination

312. \_\_\_\_\_ maintains a number of linked lists of cached pages, one per range that is involved in the broadcast schedule [20S03]

a. LIX

b. CIX

c. SIX

d. DIX

313. Approximation of perfetched algorithm is called \_\_\_\_\_ , which maintains a doubly linked circular list for the pages in each range [20S04]

a. APT

b. RPT

c. BPT

d. CPT

314. In \_\_\_\_\_ clients can access data items which deviate from the latest value according to a tolerance that is defined individually for each client [20S05]

a. Quasi caching

b. Query caching

c. Quest caching

d. No caching

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## ONLINE BITS OF DISTRIBUTED DATABASE SET-1 ANSWERS

1.REDO

2.3 Min

3.Both system crashes and transaction crashes.

4.Insite physical structure.

5.Shrinking.

6. $TC(X) = C_0 + X * C_1$

7. $SL(DEPTNUM) = \$ * OR DEPTNUM = \$ * SUPPLY$

8.System administration.

9.Server model.

10.Select AVG(QOAN) FOR SUPPLY WHERE PNUM="P"

11.Union nodes.

12.Loss of performance.

13.Completeness.

14.Body,qualification.

15.Physical.

16.Updation.

17.  $C_0 + X * C_1 (size(B) * val(B[s]) + size(R) * cost(R'))$ .

18.PJ NAME,DEPTNUM,PJ DEPTNUM= 15.

19.one-many.

20.Begin\_transaction.

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ONLINE BITS OF DISTRIBUTED DATABASE SET-2 ANSWERS

- 1.Failure without loss of information.
- 2.join graph.
- 3.rdf s:qR.
- 4.PJ NAME,DEPTNUM,DEPTNUM=15.
- 5.Locked.

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