# University of Mumbai

## Examination 2020 under cluster 4 (PCE)

Program: BE Information Technology
Curriculum Scheme: Rev 2012
Examination: Third Year Semester V
Course Code: <u>TEITC504</u> and Course Name: <u>Advanced Database Management Systems</u>

Time: 1 hour                                                                              Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

| Q1. | What is a subquery? |
|---|---|
| Option A: | A subquery is a select-from-where expression that is nested within another query |
| Option B: | A subquery is any query that is nested within another query |
| Option C: | A subquery is a relation that is externally specified which can be used to handle data in queries |
| Option D: | A subquery is a condition that excludes all the invalid tuples from the database |
| | |
| Q2. | The traditional storage of data that is organized by customer, stored in separate folders in filing cabinets is an example of what type of 'database' system? |
| Option A: | Hierarchical |
| Option B: | Network |
| Option C: | Object oriented |
| Option D: | Relational |
| | |
| Q3. | If a transaction has obtained a _____ lock, it can read but cannot write on the item |
| Option A: | Shared mode |
| Option B: | Exclusive mode |
| Option C: | Read only mode |
| Option D: | Write only mode |
| | |
| Q4. | A star schema has what type of relationship from a dimension to the fact table? |
| Option A: | Many-to-many |
| Option B: | Many-to-one |
| Option C: | One-to-one |
| Option D: | One-to-many |
| | |
| Q5. | Which of the following terms is not related to OLAP systems? |
| Option A: | Measures |
| Option B: | Dimensions |
| Option C: | Square |
| Option D: | Cube |
| | |
| Q6. | Which scheme is use transaction timestamps for the sake of deadlock prevention alone |
| Option A: | shortest Job First |
| Option B: | First In First Out |
| Option C: | Page replacement Policies |
| Option D: | wait-die scheme |
| | |

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| Q7. | Which of the following is not true for object identifier (OID) in ODBMS: |
| Option A: | OID is immutable |
| Option B: | The value of an OID is visible to the external user |
| Option C: | OID should not depend on any attribute values of the object |
| Option D: | OID is used only once |
| | |
| Q8. | Complete encapsulation of objects in ODBMS stands for: |
| Option A: | all attributes of an object must be predefined |
| Option B: | Operations a user can apply to an object can be defined later |
| Option C: | all operations a user can apply to an object must be predefined |
| Option D: | Attributes of an object can be defined later |
| | |
| Q9. | If a transaction may obtain locks but may not release any locks then it is in _____ phase. |
| Option A: | Growing phase |
| Option B: | Shrinking phase |
| Option C: | Deadlock phase |
| Option D: | Starved phase |
| | |
| Q10. | Which of the following is used to provide privilege to only a particular attribute? |
| Option A: | Grant select on employee to Amit |
| Option B: | Grant update(budget) on department to Raj |
| Option C: | Grant update(budget, salary, Rate) on department to Raj |
| Option D: | Grant delete to Amit |
| | |
| Q11. | Which of the following is not used to update the dimension table |
| Option A: | rapidly changing dimension |
| Option B: | slowly changing dimensions |
| Option C: | junk dimension |
| Option D: | fast changing dimension |
| | |
| Q12. | Which of the following is true about OLTP systems |
| Option A: | OLTP provides a snapshot of ongoing business activities |
| Option B: | OLTP systems support planning, problem solving and strategic decision making |
| Option C: | OLTP systems are periodically updated by batch jobs |
| Option D: | OLTP systems are used by Management Information System (MIS) and Decision Support Systems (DSS) |
| | |
| Q13. | _____ is a sequences of instructions that specify the chronological order in which instructions of concurrent transactions are executed is |
| Option A: | Transaction |

| | |
|---|---|
| Option B: | Program |
| Option C: | Serializability |
| Option D: | Schedule |
| | |
| Q14. | Transformation occurs by____ |
| Option A: | Using rules or lookup tables or by combining the data with other data |
| Option B: | using filters to remove bad data |
| Option C: | ERP system to clean the data |
| Option D: | Analyzing data |
| | |
| Q15. | A data warehouse is which of the following? |
| Option A: | Can be updated by end users. |
| Option B: | Contains numerous naming conventions and formats. |
| Option C: | Organized around important subject areas. |
| Option D: | Contains only current data. |
| | |
| Q16. | A _____ is a special kind of a stored procedure that executes in response to certain action on the table like insertion, deletion or updation of data. |
| Option A: | Procedures |
| Option B: | Triggers |
| Option C: | Functions |
| Option D: | Views |
| | |
| Q17. | A fact table in the center with dimension tables directly linked to it |
| Option A: | star schema |
| Option B: | starflake schema |
| Option C: | snowflake schema |
| Option D: | constellation |
| | |
| Q18. | Which one is not a kind of data warehouse application |
| Option A: | Transaction processing |
| Option B: | Information processing |
| Option C: | Analytical processing |
| Option D: | Data mining |
| | |
| Q19. | A distributed database has which of the following advantage aver centralized database. |
| Option A: | Slow response |
| Option B: | Modular growth |
| Option C: | Software cost |
| Option D: | Software complexity |
| | |
| Q20. | The process of removing deficiencies and loopholes in the data is called as |
| Option A: | Cleaning up of data |
| Option B: | Extraction of data |
| Option C: | Aggregation of data |
| Option D: | Loading of data |
| | |

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|---|---|
| Q21. | Stored procedure is a _____ set of one or more SQL statements. |
| Option A: | interpreted |
| Option B: | compiled |
| Option C: | pre compiled |
| Option D: | declared |
| | |
| Q22. | Tools that you can easily use with ETL are____ |
| Option A: | Oracle warehouse builder |
| Option B: | OL AP |
| Option C: | BI tools |
| Option D: | SAS |
| | |
| Q23. | To ensure correctness of distributed commit in DDBS the type of protocol used is? |
| Option A: | Commit protocol |
| Option B: | Two phase commit protocol |
| Option C: | Using check points |
| Option D: | Log based recovery |
| | |
| Q24. | Which of the following is true for MOLAP system? |
| Option A: | MOLAP tools rely on a pre-calculated set of data |
| Option B: | They have a slow response time |
| Option C: | Any type of queries and questions can be targeted by this approach |
| Option D: | In this approach, data is loaded from relational databases |
| | |
| Q25. | Storing a separate copy of the database at multiple locations is which of the following? |
| Option A: | Data Replication |
| Option B: | Horizontal Partitioning |
| Option C: | Vertical Partitioning |
| Option D: | Horizontal and Vertical Partitioning |

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| Question | Correct Option (Enter either 'A' or 'B' or 'C' or 'D') |
|---|---|
| Q1. | A |
| Q2. | A |
| Q3. | A |
| Q4 | D |
| Q5 | D |
| Q6 | D |
| Q7 | B |
| Q8. | C |
| Q9. | A |
| Q10. | B |
| Q11. | D |
| Q12. | A |
| Q13. | D |
| Q14. | A |
| Q15. | C |
| Q16. | B |
| Q17. | A |
| Q18. | A |
| Q19. | B |
| Q20. | A |
| Q21. | C |
| Q22. | A |
| Q23. | B |
| Q24. | D |
| Q25. | A |