SUBJECT CODE: 15BI/PC/DB14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2018
BIOINFORMATICS
FIRST SEMESTER

COURSE   : **CORE**
PAPER   : **DATABASE MANAGEMENT SYSTEMS**
TIME   : **90 MINUTES**   **MAX. MARKS: 50**
SECTION A

ANSWER ALL QUESTIONS   **(30 X 1 = 30)**

1. Which of the following is a data model?
    a. Entity-Relationship model,   c. Object-based data model
    b. Relational data model,   d. All the above
2. Entity is a ____
    a. Object of relation,   c. Thing in real world
    b. Present working model   d. Model of relation
3. Which command is used to print a file in Linux environment?
    a. print,   b. ptr,   c. Ipr   d. None of the mentioned
4. The SQL keywords(s) ____ is used with wildcards.
    a. LIKE only,   b. IN only,   c. NOTIN only,   d. IN and NOT IN
5. Linux is an
    a. Closed source,   b. Freeware,   c. open source software,   d. both a and b
6. Which command is used to change the permission of a file?
    a. chmod,   b. ch,   c. chown,   d. chgrp
7. The ___ clause is used to list the attributes desired in the result of a query.
    a. Where,   b. Select,   c. From,   d. Distinct
8. In linux, the rwx of file properties denotes_____
    a. Read write execute   c. Run write exit
    b. Both A and B   d.read and execute
9. Which one of the following statements about normal forms is FALSE?
    a. BCNF is stricter than 3 NF
    b. Lossless, dependency-preserving decomposition into 3 NF is always possible
    c. Loss less, dependency- preserving decomposition into BCNF is always possible
    d. Any relation with two attributes is BCNF
10. Referential integrity constraints are also called as ____.
11. What is the syntax to load data into the database? (Consider D as the database and a, b, c as data)
    a. enter into D (a, b, c)
    b. insert into values (a, b, c)
    c. insert into D (a, b, c)
    d. insert into D values (a,b,c)

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12. Property of normalization of relations which guarantees that functional dependencies are represented in separate relations after decomposition is classified as
    a. Nonadditive join property
    b. Independency reservation property
    c. Dependency preservation property
    d. Additive join property

13. Hashing technique which allocates fixed number of buckets is classified as ____
    a. Dynamic hashing,   c. Static hashing
    b. External hashing   d. Internal hashing

14. Consider a B+ tree in which the maximum number of keys in a node is 5. What is the minimum number of keys in any non-root node?
    a. 1,   b. 2,   c. 3,   d. 4

15. The syntax for update command in sql is _____

16. Indexing based on a sorted order of values are called ____
    a. Sequenced indices,   c. Hashing indices
    b. Ordered indices   d. Structured indices

17. What is the approximate storage capacity of CDs in MB
    a. 300,   b. 700,   c. 1100,   d. 1500

18. Range of capacity for number of tracks is
    a. 80 to 120 Kbytes
    b. 10 to 150 Kbytes
    c. 20 to 80 Kbytes
    d. 50 to 100 Kbytes

19. Which of the following is not a type of SQL statement?
    a. Data Manipulation Language (DML)
    b. Data Definition Language (DDL)
    c. Data Control Language (DCL)
    d. Data Communication Language (DCL)

20. Which server can join the indexes when only multiple indexes combined can cover the query?
    a. SQL,   b. DBMS,   c. RDBMS,   d. All of the mentioned

21. The Distinct keyword is to used to
    a. Filter the wildcards
    b. Add a string
    c. Filter duplicates
    d. Match a character

22. A condition is referred to as ___
    a. Join in SQL,   c. Join in SQL and Condition
    b. Join Condition   d. None of the mentioned
23. ___ marks the end of a successful implicit or explicit transaction
    a. COMMIT TRANSACTION
    b. ROLLBACK TRANSACTION
    c. COMMIT WORK
    d. All of the mentioned
24. Which is a new DDL statement?
    a. DROP ROLES,   c. CREATE USERS
    b. CREATE APPLICATION ROLE   d. None of the mentioned
25. Constraints can be applied on ___
    a. Column,   b. Table,   c. Field,   d. All the above
26. Data integrity constraints are used to:
    a. Control who is allowed access to the data
    b. Ensure that duplicate records are not entered into the table
    c. Improved the quality of data entered for a specific property
    d. Prevent users from changing the values stored in the table
27. Which statement issues a lock on tables?
    a. ISSUE LOCK,   b. LOCK ISSUE,   c. LOCK TABLES,   d. ISSUE LOCKS
28. In MYSQL, the syntax for creating a database is _____
29. Character data can be stored as
    a. Fixed length string,   c. Either Fixed or Variable length string
    b. Variable length string,   d. None of the above
30. The datatype for single precision floating point number is ____
    a. FLOAT,   b. DOUBLE,   c. INT, d. BIGINT

SECTION B
ANSWER ANY 2 QUESTIONS   (2 x 10 = 20)

31. Write a detailed note on pipes, filters and wildcards.
32. Describe about indexing and hashing in detail.
33. Explain about functions of SQL.
34. Give an account on constraints in SQL

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