

M. Sc. DEGREE EXAMINATION, NOVEMBER 2022
BIOINFORMATICS
FIRST SEMESTER

COURSE : CORE
PAPER : DATABASE MANAGEMENT SYSTEMS
TIME : 1½ HOURS

MAX. MARKS: 50

SECTION – A

ANSWER ALL THE QUESTIONS:

(30x1=30)

1. Core of Linux operating system is_____ .
a) Shell b) Kernel c) Terminal d) Command
2. Which command is used to remove files?
a) rm b) dm c) erase d) delete
3. Which of the following combination of keys is used to exit from terminal?
a) Ctrl + z b) Ctrl + t c) Ctrl + d d) Ctrl + e
4. The range of nice number in linux system is -
a) -20 to 0 b) -20 to 19 c) 0 to 19 d) 10 to 10
5. User passwords are stored in
a) /root/password b) /etc/password
c) /etc/passwd d) /root/passwd
6. Single row function performs _____ of the decimal number
a) round b) sum c) avg d) none
7. Hidden file can be viewed using _____.
a) ls -a b) ls -l c) ls -h d) ls -k
8. Which command is used to display the operating system name?
a) os b) unix c) uname d) kernel

9. Which command is used to display the unix version?
- a) kernel b) `uname -t` c) `uname -r` d) `uname -n`
10. A relational database consists of a collection of
- a) Tables b) Fields c) Records d) Keys
11. Which one of the following is a set of one or more attributes taken collectively to uniquely identify a record?
- a) Candidate key b) Sub key c) Super key d) Foreign key
12. Consider attributes ID , CITY and NAME . Which one of this can be considered as a super key ?
- a) NAME b) ID c) CITY d) CITY , ID
13. Which one of the following cannot be taken as a primary key ?
- a) Id b) Register number
c) Dept_id d) Street
14. Using which language can a user request information from a database ?
- a) Query b) Relational c) Structural d) Compiler
15. Which one of the following is used to define the structure of the relation ,deleting relations and relating schemas ?
- a) DML(Data Manipulation Language) b) DDL(Data Definition Language)
c) Query d) Relational Schema
16. Delete from r; r – relation
- This command performs which of the following action ?
- a) Remove relation b) Clear relation entries
c) Delete fields d) Delete rows
17. Which is operator is used for appending two strings.?
- a) `&` b) `%` c) `||` d) `_`

18. Select is a _____ query
- a) DDL
 - b) DML
 - c) DCL
 - d) TCL
19. Data manipulation language (DML) means
- a) describes how data are structured in the data base
 - b) specifies for the DBMS what is required; the techniques used to process data
 - c) determine how data must be structured to produce the user's view
 - d) All of the above
20. The language used application programs to request data from the DBMS is referred to as
- a) DML
 - b) DDL
 - c) Query language
 - d) DCL
21. Which of the following keyword is used with Data Control Language (DCL) statements?
- a) SELECT
 - b) INSERT
 - c) DELETE
 - d) GRANT
22. Which of the following statements are TRUE?
- a) A Unique constraint allows multiple rows to have NULL value
 - b) Integrity constraint can be added to a table even if table data is in violation
 - c) A PRIMARY KEY allows a single row to contain NULL
 - d) Both A and B
23. Which of the following statement removes database including its related components?
- a) DROP DATABASE
 - b) DELETE DATABASE
 - c) REMOVE DATABASE
 - d) None of the mentioned
24. In the following SQL code, InnoDB is
- a) database name
 - b) table name
 - c) reference engine
 - d) storage engine
25. In SQL, Which clause is used to sort query elements?
- a) GROUP
 - b) GROUP BY
 - c) ORDER
 - d) ORDER BY

26. What is used to perform an analysis of key values by the server?
a) ANALYZE KEYS b) ANALYZE TABLE
c) PERFORM ANALYSIS d) PERFORM TABLE ANALYSIS
27. MySQL comes with as standard with client libraries for:
a) C only b) Java only c) Java and C d) Perl, PHP and C
28. Commands passed to the MySQL daemon are written in
a) Your choice from Perl, PHP, Java or some other languages
b) English
c) the Structured Query Language
d) Swedish
29. Which of the following can add a row to a table?
a) Alter b) Add c) Insert d) Create
30. MySQL runs on which operating systems?
a) Unix and Linux only b) Linux and Mac OS-X only
c) Unix, Linux, Windows and others d) Any operating system at all

SECTION – B

ANSWER ANY TWO QUESTIONS

(10x2=20)

31. Describe about the properties of Linux and write about the basic Linux commands and its functions
32. Explain about the Relational Database design. List out the functional dependences and normalization for Relational Databases
33. MySQL as an RDBMS Tool – Justify with valid explanation
34. Explain the set operators and joins that are available in connecting tables.
