

**BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025****2018, 2019, 2020, 2021, 2022 ADMISSIONS SUPPLEMENTARY****BCA SEMESTER IV - CORE COURSE****BCA4B13B18 - Database Security Fundamentals****Time : 3 Hours****Maximum Marks : 80****Part A****I. Answer any Ten questions. Each question carries 2 marks****(10x2=20)**

1. Define object and class in object based DBMS.
2. Define foreign key.
3. Give the symbols used and its purpose in ER diagram.
4. What is the purpose of sql SELECT command?
5. What is DML? Explain various DML commands.
6. Write a short note on the history of Open database connectivity.
7. Write the full form of TOGAF? Explain It.
8. State Security Testing.
9. Discuss Security Auditing.
10. Define Data Mart.
11. Define the characteristics of Metadata.
12. State the functions of Middle tier In data warehousing.

**Part B****II. Answer any Six questions. Each question carries 5 marks****(6x5=30)**

13. What is data independence? Differentiate between physical and logical data independence.
14. Explain the object-based database management system.
15. What is auditing? Explain its types.
16. What are triggers? Explain how they are used in database security.
17. Differentiate between Boolean based and Time based sql attacks.
18. Explain techniques for securing database server.
19. Distinguish between basic client-server and three tier approaches.
20. Discuss the Data Mining Issues.
21. Explain the difference between Data warehousing and Data Mining.

**Part C****III. Answer any Two questions. Each question carries 15 marks****(2x15=30)**

22. Explain the three - schema architecture for data base.
23. Discuss the various database security mechanisms suggested by Oracle.
24. Write an essay about Remote Access and its types(10). Explain any two protocols used in remote access(5).
25. Describe Patch management and its process flow.