Reg. No. : ....

Name : ....

II Semester B.Sc. Degree (CBCSS – O.B.E – Regular) Examination, April 2021
(2020 Admission)
COMPLEMENTARY ELECTIVE COURSE IN LIFE SCIENCES (ZOOLOGY) AND COMPUTATIONAL BIOLOGY
2C02CSC-ZCB : Database Management Systems

Time : 3 Hours

Max. Marks : 32

PART – A
(Short Answer)

Answer **all** questions. **Each** question carries **1** mark.

1. What is an Attribute ?

2. Define Superkey.

3. What is DDL ?

4. Define the purpose of Relational Algebra.

5. Explain Domain in Relational Algebra.

(5×1=5)

PART – B
(Short Essay)

Answer **any four, not** exceeding **75** words. **Each** question carries **2** marks.

6. Explain Logical Schema.

7. Define the role of Database Administrator.

8. Explain Multivalued Dependency.

9. Define first normal form.

10. What is the purpose of ORDER BY clause in SQL ?

11. Define Fields and Records in Relational Algebra.

(4×2=8)

P.T.O.

PART – C

(Essay Questions)

Answer **any three**, **not** exceeding 150 words. **Each** question carries **3** marks.

12. Explain the role of any three Database users.

13. Explain Create and Drop SQL statements.

14. Explain Inner and Outer Join with example.

15. Explain GROUP BY and HAVING Clause in SQL.

16. Explain with example the purpose of project statement in Relational Algebra.

(3×3=9)

PART – D

(Long Essay)

Answer **any two**, **not** exceeding 300 words. **Each** question carries **5** marks.

17. Explain Database structure with a neat diagram.

18. Explain the use of Normalization in Database Design. What are the different Normal forms ? Explain BCNF.

19. Create a Product Database and perform i) Insert product information ii) Sort product information based on Product Name iii) Delete a product based on product ID.

20. Explain the following :
    a) Tuple Relational Calculus.
    b) Domain Relational Calculus.

(2×5=10)

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