

FACULTY OF ARTS & SOCIAL SCIENCES/SCIENCE
B.A/B.Sc. (CBCS) II-Year (III-Semester) Regular Examinations, Dec-2022/Jan-2023
Computer Applications-III (Gen)
(Relational Database Management Systems)

Time: 3 Hours

Max Marks: 80

SECTION-A

(4x5=20 Marks)

Answer any Four questions from the following

1. Write a note on Data Dictionary.
2. Write a note on Rules of Data Normalization.
3. Write about Recursive Queries.
4. Describe Locking Protocol.
5. Discuss about Security and Integrity.
6. What is the difference between Primary Key and Foreign Key? Give Example.

SECTION-B

(4x15=60 Marks)

Answer all the following questions

7. (a) Explain Physical DBMS Architecture and logical DBMS Architecture in detail.
(OR)
(b) What is ER diagram? Create an ER diagram of an industry that captures important information in the tracking of production.
8. (a) What is Normalization. Explain different types of Normal forms?
(OR)
(b) Explain Indexed sequential file organization and Heap files.
9. (a) Discuss about Nested Queries and Table Handling with examples.
(OR)
(b) Explain Functions and Procedures in SQL programming? Give example.
10. (a) Explain in detail about Two Phase Locking and Optimistic Concurrency control.
(OR)
(b) Explain Backup and Recovery techniques and Kinds of Failures in Database management.