

SECTION-A

1. What are the different types of data models supported by database system ? Explain Network Model in detail. 15
2. Explain the following terms giving suitable example :
(a) Strong Entity (b) Weak Entity
(c) Relationships (d) Specialization
(e) Generalization. 5×3=15

SECTION-B

3. How BCNF performs better than Third normal form ? Explain using example. 15
4. What is Concurrency Control ? What are its potential problems ? Explain the concept of Lock-based Protocols in CC. 15

SECTION-C

5. (a) Explain the concept of DCL. Define DCL statements using suitable examples. 8
(b) Explain the concept of SQL Intersection using example. 7
6. What do you mean by Database Triggers ? Discuss its different types. Write the syntax for creating a database trigger using different parameters. 15

SECTION-D

7. How Big Data is used to solve the problems of large database ? Explain its use in Data Analytics. 15
8. Differentiate between SQL and NoSQL. Which one is better to use ? Explain using examples. 15