

May 2024

**BBA (GEN) Re-Appear- IV SEMESTER  
DataBase Management System (BBA-GEN-404)**

Time : 3 Hours]

[Max. Marks : 75

*Instructions :*

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

**PART-A**

1. (a) Define Schema in brief. (1.5)
- (b) Explain different types of attributes of an entity. (1.5)
- (c) Define different type of database users? (1.5)
- (d) Differentiate Data and Meta-Data. (1.5)
- (e) Differentiate Structured and Un-structured data. (1.5)
- (f) Define Atomicity in brief. (1.5)
- (g) Define the utility of Digital Libraries. (1.5)
- (h) Explain the functionalities of Firewalls. (1.5)

- (i) Give example of any 2 front-end and back-end tools. (1.5)
- (j) What is the need to create instance of data? (1.5)

**PART-B**

- 2. (a) Explain 2-tier and 3-tier architectures of DBMS with their advantages. (10)
- (b) Explain any 2 Database recovery techniques in brief. (5)
- 3. (a) Explain the roles of Database administrator in detail. (5)
- (b) Explain different data models in detail. (10)
- 4. Draw an ER diagram for the Banking System. Assume the entities, their attributes and relationships by your own and hence reduce the ER diagram into tables. (15)
- 5. (a) Explain weak entity with appropriate example. (5)
- (b) What is the need of database security? Explain different threats and security issues. (10)
- 6. Explain different emerging data base technologies related to data warehousing and data mining in detail. (15)

- 7. Explain the following databases in detail :
    - (a) Multimedia Database.
    - (b) Mobile Database.
    - (c) Spatial Database. (15)
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