



BRAINWARE UNIVERSITY

Course – MAMW

Database Management System (MMW104)

(Semester – 1)

Time allotted: 3 Hours

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Questions)

10 x 1 = 10

1. *Choose the correct alternative from the following*

(i) Which is not a database management software?

- | | |
|-----------|------------------|
| a. Oracle | b. MS-SQL server |
| c. MySQL | d. Notepad |

(ii) In the E-R diagram the entity is represented as_____.

- | | |
|---------------------|--------------|
| a. Square | b. Circle |
| c. Double rectangle | d. Rectangle |

(iii) The “A” in ACID property stands for_____.

- | | |
|--------------|-----------|
| a. Atomicity | b. Action |
| c. Amount | d. Access |

(iv) CREATE in SQL is a_____.

- | | |
|----------------|----------------|
| a. DML command | b. DCL command |
| c. DDL command | d. DQL command |

- (v) Online Transaction history stored in_____.
 - a. Database
 - b. Word file
 - c. Web server
 - d. None of these
- (vi) Transitive dependency get removed in_____.
 - a. 1 NF
 - b. 2NF
 - c. 3NF
 - d. None of these
- (vii) The primary key is chosen from_____.
 - a. Candidate keys
 - b. Unique keys
 - c. Files
 - d. None of these
- (viii) How we can delete a row using SQL?
 - a. Delete
 - b. Drop
 - c. Del
 - d. Truc
- (ix) The multivalued dependency is not present in _____.
 - a. 3 NF
 - b. BCNF
 - c. 2NF
 - d. 4NF
- (x) Normalization is used in database to remove_____.
 - a. Bad functional dependencies
 - b. Good functional dependencies
 - c. Network connection
 - d. CPU power

Group – B

(Short Answer Type Questions)

3 x 5 = 15

Answer any *three* from the following

- 2. What are the advantages of database management system? [5]
- 3. What is a multimedia file? How we can store data in a table in database? [2 + 3]
- 4. What is a relational data model? What is an weak entity? [3 + 2]
- 5. What are the basic properties of a good database management software? [5]
- 6. How normalization helps to design a good database? [5]

Group – C

(Long Answer Type Questions)

3 x 15 = 45

Answer any *three* from the following

7. (a) What is foreign key? Briefly explain with example. [5]
(b) Write down the basic properties of a transaction. [10]
8. (a) Briefly explain the concept of multimedia database. [5]
(b) Explain 3NF and BCNF in database normalization. [10]
9. (a) What is a DDL and a DML in structure query language (SQL)? [5]
(b) What is a transaction processing steps? Briefly explain. [10]
10. Draw an E-R diagram of a banking system. Consider the entities and the relationships according to your choice. [15]
11. Write short notes (Any three) [3X5]
 - (a) Three Scheme architecture
 - (b) Concurrency control techniques.
 - (c) Data definition language (DDL).
 - (d) Logical v/s Physical data independence.