



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Second Semester – 2019

Paper: Computer -II

Course Code: COMP-103 Part – I (Compulsory)

Time: 15 Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer cutting and overwriting is not allowed. (10x1=10)

1. Which of the following is not an Aggregate function?
 - A. Min
 - B. Max
 - C. Select
 - D. Avg
2. The attribute that can be divided into other attributes is called
 - A. Simple Attribute
 - B. Composite Attribute
 - C. Multi-valued Attribute
 - D. Derived Attribute
3. In an Entity-Relationship Diagram “Ellipses” represents
 - A. Attributes
 - B. Weak entity set
 - C. Relationship sets
 - D. Multi-valued attributes
4. In an Entity-Relationship Diagram “Diamonds” represents
 - A. Attributes
 - B. Multi-valued attributes
 - C. Weak entity set
 - D. Relationship sets
5. What is ACID properties of Transactions?
 - A. Atomicity, Consistency, Isolation, Database
 - B. Atomicity, Consistency, Isolation, Durability
 - C. Atomicity, Consistency, Inconsistent, Durability
 - D. Automatically, Concurrency, Isolation, Durability
6. If every non-key attribute is functionally dependent on the primary key, the relation will be in
 - A. First Normal Form
 - B. Second Normal Form
 - C. Third Normal Form
 - D. Fourth Formal Form

P.T.O.

7. **Database locking concept is used to solve the problem of**
A. Lost Update
B. Uncommitted Dependency
C. Inconsistent Data
D. All of the above
8. **UML stands for**
A. Universal Modeling Language
B. Unified Modeling Language
C. United Modeling Language
D. Uni Modeling Language
9. **Data Manipulation Language (DML) is not to**
A. Create information table in the Database
B. Insertion of new information into the Database
C. Deletion of information in the Database
D. Modification of information in the Database
10. **Which of the following is true regarding Referential Integrity?**
A. Every primary-key value must match a primary-key value in an associated table
B. Every primary-key value must match a foreign-key value in an associated table
C. Every foreign-key value must match a primary-key value in an associated table
D. Every foreign-key value must match a foreign-key value in an associated table



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Time: 2 Hrs. 45 Min. Marks: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give short answer of the following questions

(10x2=20)

- 1) What do you understand by 'Database'?
- 2) Define DBMS?
- 3) Define RDBMS?
- 4) Enlist the advantages of DBMS?
- 5) What do you understand by Data Redundancy?
- 6) What do you understand by Data Independence? What are its two types?
- 7) Explain Normalization and De-Normalization?
- 8) How many SQL statements are used? Define them.?
- 9) What is BCNF?
- 10) What is SQL?

Subjective Type

Marks(3*10=30)

Q3. What is ERD? Draw and explain ERD for Bank Management System?

Q4. Discuss 3- schema architecture in detail?

Q5. Discuss database development process in detail?