ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution

WORKSHEET – 33

Topic : Normalization

Subject: COMPUTER SCIENCE   **Class - 12**   **F.M:15**

Chapter: Relational Model and Normalization   **Date: 08/08/2020**

Choose the correct answer for each question: 15x1=15

1. Tables in second normal form (2NF):
   a) Eliminate all hidden dependencies
   b) Eliminate the possibility of a insertion anomalies
   c) Have a composite key
   d) Have all non-key fields depend on the whole primary key

2. If one attribute is determinant of second, which in turn is determinant of third, then the relation cannot be:
   a) 1NF
   b) 2NF
   c) 3NF
   d) All of the mentioned

3. Choose the incorrect option:
   a) In the 2NF, relational must be in 1NF.
   b) In the 3NF, relational must be in 1NF.
   c) In the 3NF, relational must be in 2NF.
   d) None of these

4. First normal form disallows:
   a) multi-valued attribute
   b) composite attribute
   c) either (a) or (b)
   d) All of the mentioned

5. Third normal form is inadequate in situations where the relation :
   a) has multiple candidate keys
   b) has candidate keys that are composite
   c) has overlapped candidate keys
   d) none of the above

6. The functional dependency is a relationship that exists between two _____.
   a) tuples
      b) attributes
      c) relations
      d) All of the mentioned

7. Which forms simplifies and ensures that there are minimal data aggregates and repetitive groups:
    a) 1NF
    b) 2NF
    c) 3NF
    d) All of the mentioned

8. Which is a bottom-up approach to database design that design by examining the relationship between attributes:
    a) Functional dependency
    b) Database modeling
    c) Normalization
    d) Decomposition

9. Functional Dependencies are the types of constraints that are based on_____
    a) Key
    b) Key revisited
    c) Superset key
    d) None of the mentioned

10. Functional dependencies are a generalization of :
    a)Relation dependencies
    b) Key dependencies
    c) Database dependencies
    d) None of the mentioned

11. The database design prevents some data being stored due to _____.
    a) deletion anomalies
    b) updation anomalies
    c) insertion anomalies
    d) select anomalies

12. A/an _____ is a data inconsistency that results from data redundancy and a partial update.
    a) delete anomaly
    b) update anomaly
    c) insert anomaly
    d) none of these

13. In the _____ normal form, a composite attribute is converted to individual attributes.
    a) First
    b) Second
    c) Third
    d) Fourth

14.

Empdt1(empcode, name, street, city, state, pincode).

For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in

a) 1 NF only

b) 2 NF and hence also in 1 NF

c) 3NF and hence also in 2NF and 1NF

d) None of these

15. Which forms are based on the concept of functional dependency:

a) 1NF

b) 2NF

c) 3NF

d) 4NF

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