



# ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



## WORKSHEET – 28 (ANSWER KEY)

### Topic : Normalization

Subject: COMPUTER SCIENCE

Class - 12

F.M:15

Chapter: Database Management System

Date: 10/07/2020

### 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. A \_\_\_\_\_ is the unintended loss of data due to deletion of other data.
- a) **delete anomaly**
  - b) update anomaly
  - c) insert anomaly
  - d) none of these
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.

Emp\_Id → Emp\_Name

Choose the correct option:

- a) **Emp\_Id is the determinant**
- b) Emp\_Name is the determinant
- c) Emp\_Id is the dependent
- d) None of these

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