

Dipmay Biswas

2021CSB043

17  
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B.Tech (5<sup>th</sup> sem) Class Test, Sept 2023  
Database Management Systems (CS3102)

F. M. = 20

Time – 30 minutes

Answer all questions

1. At which level of data abstraction it describes how the data is actually stored?

at physical level 2

2. Capacity to alter database schema at one level without altering any other schema level is classified as

- (a) data mapping
- ✓(b) data independence
- (c) data dependence
- (d) data transformation

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3. Files are logically partitioned into storage units of fixed-length known as

- (a) Sectors
- (b) Tracks
- (c) Segments
- ✓(d) Blocks

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4. Which of the following is/are database user/s?

- (a) DBA
- (b) Programmer
- (c) End user
- ✓(d) All of the above

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5. Collection of information stored in a database at a particular moment is:

- (a) view
- (b) schema
- ✓(c) instance
- (d) none of the above

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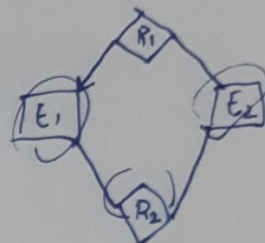
6. Fill in the blank:

Foreign key is the one in which the \_\_\_\_\_ of one relation is referenced in another relation.

- a) Foreign key
- ☒ b) Primary key
- ☒ c) References
- d) Check constraint

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7. Let  $E_1$  and  $E_2$  be two entities in an E/R diagram with simple single-valued attributes.  $R_1$  and  $R_2$  are two relationships between  $E_1$  and  $E_2$ , where  $R_1$  is one-to-many and  $R_2$  is many-to-many.  $R_1$  and  $R_2$  do not have any attributes of their own.



What is the minimum number of tables required to represent this situation in the relational model?

3 tables

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8. Given relations  $r(w, x)$  and  $s(y, z)$ , the result of 'select distinct  $w, x$  from  $r, s$ ' is guaranteed to be same as  $r$ , provided :

- (a)  $r$  has no duplicates and  $s$  is non-empty
- ☒ (b)  $r$  and  $s$  have no duplicates
- (c)  $s$  has no duplicates and  $r$  is non-empty
- (d)  $r$  and  $s$  have the same number of tuples

NO

9. The employee salary should not be greater than Rs. 50000. What type of constraints is it?

check constraint

1

10. Which of the following is not correct about view?

- (a) view does not physically exist
- ☒ (b) view is a table
- (c) view is used as securing mechanism
- (d) update through view is sometimes ambiguous

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