Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17CA2054** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DATAABASE SECURITY FUNDAMENTALS** | **Max. Marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | \_\_\_\_\_\_\_ management defines the rules that determine the users access to the database. | CO1 | 1 |
| b. | \_\_\_\_\_\_\_\_ is used quickly to locate and access data in a database. | CO1 | 1 |
| c. | Define consistency property of database. | CO1 | 2 |
| d. | Define the function of query evaluation engine. | CO1 | 2 |
| e. | Explain the responsibilities of DBA. Also explain the different types of database administrators. | CO1 | 14 |
| **(OR)** | | | | |
| 2. | a. | \_\_\_\_\_\_ users use existing application to interact with the database. | CO1 | 1 |
| b. | \_\_\_\_\_\_ translates DML statements in a query language into low-level instruction. | CO1 | 1 |
| c. | Define atomic property of database. | CO1 | 2 |
| d. | Write a short note on Hierarchical database. | CO1 | 2 |
| e. | Elaborate note on the following   1. Functions of DBMS 2. Problems with the flat file processing | CO1 | 7  7 |
|  |  |  |  |  |
| 3. | a. | Statements in \_\_\_\_\_\_\_\_\_\_ language creates database objects. | CO2 | 1 |
| b. | List down the data control statements. | CO2 | 1 |
| c. | Give a one line note on any four integrity constraints. | CO2 | 2 |
| d. | Write short note on DML. | CO2 | 2 |
| e. | Explain the different ways of interfacing with database. | CO2 | 14 |
| **(OR)** | | | | |
| 4. | a. | \_\_\_\_\_\_\_\_\_\_ withdraw user's access privileges to database. | CO2 | 1 |
| b. | \_\_\_\_\_\_\_\_\_\_ statement identify a point in transaction to which user  can later roll back. | CO2 | 1 |
| c. | Define domain constraints and referential integrity. | CO2 | 2 |
| d. | Write short note on transaction control statements. | CO2 | 2 |
| e. | Give a detailed overview of OLE-DB. | CO2 | 14 |
|  |  |  |  |  |
| 5. | a. | \_\_\_\_\_\_\_\_\_\_ allows accessing data from variety of sources. | CO3 | 1 |
| b. | State two differences between web server and application server. | CO3 | 1 |
| c. | Explain briefly the function of HTTP accelerator. | CO3 | 2 |
| d. | Write a short note on http. | CO3 | 2 |
| e. | Discuss the various methods of connecting a DBMS. | CO3 | 14 |
| **(OR)** | | | | |
| 6. | a. | \_\_\_\_\_\_\_\_\_ server is suitable for static content. | CO3 | 1 |
| b. | Write short on proxy server. | CO3 | 1 |
| c. | Write short note on Web Browser. | CO3 | 2 |
| d. | List down the various types of servers available in market. | CO3 | 2 |
| e. | Explain in detail three-tier architecture. | CO3 | 14 |
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| 7. | a. | \_\_\_\_\_\_\_\_\_\_ would extract information from multiple data sources and of different formats. | CO4 | 1 |
| b. | State the difference between data warehouse and operational database. | CO4 | 1 |
| c. | Define classification. | CO4 | 2 |
| d. | Define OLAP. | CO4 | 2 |
| e. | Give a detailed overview of the basic concepts of Data Warehouse. | CO4 | 14 |
| **(OR)** | | | | |
| 8. | a. | \_\_\_\_\_\_\_\_\_ is the subset of data warehouse. | CO4 | 1 |
| b. | \_\_\_\_\_\_\_\_\_\_ is the process of eliminating incomplete, noisy and inconsistent data from the database. | CO4 | 1 |
| c. | Define clustering. | CO4 | 2 |
| d. | Define prediction. | CO4 | 2 |
| e. | Explain ETL process. Give few tools used in ETL process. | CO4 | 14 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Give the necessity for database auditing. | CO6 | 1 |
| b. | Define database security. | CO5 | 1 |
| c. | Define application audit. | CO6 | 2 |
| d. | List down the benefits of data auditing. | CO6 | 2 |
| e. | Describe the primary methods used to accomplish database auditing. | CO6 | 14 |