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



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

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| **Code :** | **17CS3041** | **Duration**  : | **3hrs** |
| **Sub. Name :** | **DATABASE SECURITY** | **Max. Marks** : | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Illustrate the state of art Database security research focusing on networking and infiltration methods. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Consider an Enterprise which was targeted by intruders with “slammer worm”. Analyze suitable defensive approach to address this database security problems. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Illustrate the core components of “DBAUTH View” and “TABAUTH View”. Highlight its unique Authorization support for different user levels. | CO2 | 20 |
| **(OR)** | | | | |
| 4. | a. | Assume that a Client wants to establish a session with the IBM DB2 server which is listening to TCP port 50000 and IP. 192.168.0.99 in the remote environment. Write down the necessary commands used to establish connection with some weak credentials. What are the Pitfalls in Remote Authentication Methods? | CO2 | 10 |
| b. | Elaborate on various security considerations and solutions which Oracle offers to prevent Database from active and passive attacks. | CO3 | 10 |
|  |  |  |  |  |
| 5. |  | Elucidate the Sybase Security Checklist to be enforced to preventor limit Database systems from various forms of insider attacks. | CO5 | 20 |
| **(OR)** | | | | |
| 6. |  | Consider a following Scenario, which is issued by client as configurations Requirement.  *Configuration Data.*   * Default Failed Login : 3 * Max\_Failed Login for user “SA\_Admin”: 2 * HR(Role) Failed\_Login : 3 * Ensure All the Given passwords Has at least 3-digits length. * Disable JAVA Access for internal users in Sybase.   i) Apply Suitable Admin Configurations through Commands to secure Sybase ASE for the given scenario.  ii) List all necessary Security Recommendations need to be followed to enforce security in Sybase.  (Note: Assume that HR Role is Created in Database Level) | CO4 | 20 |
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| 7. |  | Illustrate Routine Auditing followed in MySQL Security Consideration with suitable Command line examples. | CO5 | 20 |
| **(OR)** | | | | |
| 8. | a. | Elucidate various roles listed in Sybase and its associated operations in Database Access Level. | CO6 | 10 |
| b. | Examine the Logical Architectural of MySQL Database with suitable command line examples to view its structural constructs. | CO6 | 10 |
|  | | **Compulsory**: |  |  |
| 9. |  | Mr. Tom was an Ex-Employee of ESoft Pvt Ltd, who used unethical method to grant certain privilege escalations. How as a Database Administrator you can monitor his activities in database through Oracle auditing? Write required SQL commands to exemplify Auditing Process. | CO5 | 20 |