

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2024

M.Tech-I Semester (CSE/IT)

COURSE CODE (CREDITS): 18M11CI113(3)

MAX. MARKS: 35

COURSE NAME: Advanced Database System Security

COURSE INSTRUCTORS: Dr. Rakesh Kanji

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	Marks
Q1	(i) Explain the purpose of Database replication. (ii) Point out the difference between master-master and master-slave architecture for Database replication. (iii) Explain the role of distribution agent and snapshot agent.	2+1+2
Q2	(i) Explain the conditions are important to choose snapshot replication. (ii) Provide the configuration steps for peer to peer replication.	2+3
Q3	(i) Compare windows security log and windows application log. (ii) Explain the purpose of anyone audit action group for each server level and database level auditing. (i) Write a script for server level auditing with multiple action group.	1+2+2
Q4.	(i) What are the ways to implement data level security? (ii) Specify the purpose of schema with a diagram. What is the name of default schema? (iii) Implement the ownership chaining in any one way.	1+2+2
Q5.	(i) Explain the row level security with the SQL code. (ii) Develop the trigger enabling with impersonation.	2.5+2.5
Q6.	(i) Provide the applications of watermarking technique. (ii) Explain Agarwal or Sion single bit embedding algorithm. (iii)Justify that Sion watermark algorithm is more powerful than Agarwal watermark algorithm.	1+2+2
Q7.	(i) Apply error based SQL injection to fetch user name and password. (ii) Provide the remedy to stop SQL injection.	3+2