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| ( An Autonomous Institute Affiliated to SPPU) | **ASSIGNMENT** | |
| **ACADEMIC YEAR** | 2019-20 |
| **Alandi (D), Pune – 412105** | **SEM / TRI** | IV |
| **SCHOOL OF COMPUTER ENGG. & TECHNOLOGY** | **DIVISION** | A & B |

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| **COURSE** | DATABASE MANAGEMENT SYSTEM | **ASSIGNMENT NO.** | 3 |
| **COURSE INSTRUCTOR** | DIPTEE GHUSSE | **DATE** | 16/04/2020 |

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| **Que. No.** | **Question Description** | **Marks** | **CO No.** | **BT Level** |
| 1 | Consider the following schedule   |  |  | | --- | --- | | T1 | T2 | | R(X) |  | | W(X) |  | |  | R(X) | |  | COMMIT | | R(Y) |  | | COMMIT |  | |  |  |   Find out whether the schedule is a recoverable schedule or a cascadeless schedule or both .  Give reasons for the same. (Correct answer 2 marks, 3 marks for justification) | 6 | CO4 | L3 |
| 2 | Consider the following schedule S of transaction T1,T2,T3  T1:R(X),W(Y);T2:R(X),W(Y);T3:W(X),W(Y)  HOW MANY CONFLICT EQUIVALENT SERIAL SCHEDULE OF S ARE POSSIBLE. (Correct answer 1 marks, 2 marks for justification) | 3 | CO4 | L3 |
| 3 | T2:R(X);T3:W(X);T3:COMMIT;T1:W(X);T1:COMMIT;T2:W(Y);T2:R(Z);T2:COMMIT;T4:R(X);T4:R(Y);T4:COMMIT  FIND OUT WHETHER THE SCHEDULE IS  CONFLICT SERIALIZABLE, RECOVERABLE, CASCADELESS . EXPLAIN EACH CASE IN DETAIL WITH REASONS. | 5 | CO4 | L3 |
| 4 | F:\DBMS\SEM_II_2019_20\drawing1.jpg  Select the correct option   1. The schedule is only VIEW SERIALIZABLE 2. The schedule is only CONFLICT SERIALIZABLE 3. The schedule is CONFLICT SERIALIZABLE and VIEW SERIALIZABLE 4. There is a Deadlock | 2 | CO4 | L3 |
| 5 | Consider the following statistics for searching for a condition in a given relation:  Number of blocks containing record of the relation(b) =10  Time to transfer one block(tb) =0.1 ms  Tome for one seek (ts) = 4 ms  Identify the cost of selection query on a key attribute using linear search file scan. | 4 | CO5 | L3 |

**Course Instructor**

Sign with Date