ASSIGNMENT-4

Q1. Write importance of normalization. Also Explain its types.

Q2. Shot note:

a) functional dependency and its inferential rules.

b) prime attributes and non prime attributes.

Q3. How deadlock is handled in DBMS. Explain WFG with example.

Q4. Consider a schema R(A, B, C, D) and functional dependencies A -> B and C -> D. Then the decomposition of R into R1 (A, B) and R2(C, D) is

(a) dependency preserving and lossless join

(b) lossless join but not dependency preserving

(c) dependency preserving but not lossless join

(d) not dependency preserving and not lossless join

Q5 . The relation schema Student_Performance (name, courseNo, rollNo, grade) has the following FDs:

name,courseNo->grade

rollNo,courseNo->grade

name->rollNo

rollNo->name

The highest normal form of this relation scheme is

(a) 2NF (b) 3NF (c) BCNF (d)4NF

Q6. The relation EMPDT1 is defined with attributes empcode(unique), name, street, city, state, and pincode. For any pincode,there is only one city and state. Also, for any given street, city and state, there is just one pincode. In normalization terms EMPDT1 is a relation in

(a) 1NF only

(b) 2NF and hence also in 1NF

(c) 3NF and hence also in 2NF and 1NF

(d) BCNF and hence also in 3NF, 2NF and 1NF