DR. M.P.S. MEMORIAL COLLEGE OF BUSINESS STUDIES, AGRA

BCA DEPARTMENT

SUBJECT: DATABASE MANEGEMENT SYSTEM

CLASS: BCA 3 SEM

IMPORTANT QUESTIONS OF ODD SEM EXAMS JAN 2022

Q1. Describe the architecture of DBMS.

Q2. Explain the data model in detail.

Q3. Define E-R model with example. How to convert an E-R model into Relational schema?

Q4. What are functional dependencies? Write the types of functional dependencies.

Q5. What is Normalization? Explain 1NF, 2NF and 3NF with example.

Q6.Explain aggregate function with syntax and example.

Q7.Explain grant and revoke command with syntax and example.

Q8. Distinguish any four points between network model and hierarchical model.

Q9. Write SQL query for following consider table

EMP(empno , deptno, ename ,salary, Designation, joiningdate, DOB,city)

i) Display names of employees whose experience is more than 10 years
ii) Display age of employees
iii) Display average salary of all employee
iv) Display name of employee who earned highest salary

Q10. Write SQL query for following consider table
EMP(empno , deptno, ename ,salary, Designation, joiningdate, DOB,city)

i) Display employees name and number in an increasing order of salary
ii) Display employee name and employee number dept wise
iii) Display total salary of all employee

iv) Display number of employees dept wise

v) Display employee name having experience more than 3 years

vi) Display employee name staring with "S" and working in deptno 1002

Q11. Explain insertion, deletion and modification anomalies. Why are they considered bad? Illustrate with example.

Q12. Define the following with an example:
Weak entity type and strong entity type

Q13. Define the following terms
   i) Key
   ii) Super key
   iii) Candidate key
   iv) Primary key
   v) Foreign key

Q14. What are concurrency control techniques and Why it is needed?

Q15. What are ACID properties? Explain with example