Roll No. | | | | | | | | | | | | **Total No. of Pages :02**

Total No. of Questions : 09

MCA (2012 & Onward) (Sem.–2)

RELATIONAL DATABASE MANAGEMENT SYSTEM

Subject Code :MCA-202

Paper ID : [B0134]

Time : 3 Hrs. **Max. Marks : 100**

INSTRUCTION TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**
3. **Use of non-programmable scientific calculator is allowed.**

SECTION A

Q1. (a) What is Data Independence? Explain the concept of Physical DataIndependence.

(b) Describe different types of Relationships in ER Model.

Q2. (a) Diagrammatically explain the architecture of DBMS.

(b) Discuss in brief database design, implementation and loading.

SECTION B

Q3. (a) What is Normalization? Describe first and second normal forms.

(b) What is the difference between OOD and ORD?

Q4. (a) What is Database Integrity? Explain integrity constraints.

(b) Define Concurrency. How can you control concurrency?

SECTION C

Q5. (a) What is DDBMS? Explain advantages and disadvantages of DDBMS.

(b) Explain the components of Distributed Database Management Systems.

Q6. (a) What is the difference between Client server and DDBMS?

(b) What are MPSD and MPMD? Explain with examples.

SECTION D

Q7. (a) What is Decision Support System? Explain properties of DSS.

(b) What is OLAP? Explain the architecture of OLAP.

Q8. (a) Describe in brief database administration tools.

(b) What is Business Intelligence? Explain the role of DSS in it.

SECTION E

Q9. Write short notes on following with help of example/diagram if needed :

(a) Tine Stamping Method

(b) Logical Data Independence

(c) Primary Key

(d) SPSD

(e) Database Security

(f) Two Phase Locking

(g) Weak Entity

(h) SQL

(i) BCNF

(j) Entity Integrity