MCA,SEM II,2014

RELATIONAL DATABASE MANAGEMENT SYSTEM

PAPER CODE: MCA 202

PAPER ID:[B0134]

Note: Attempt five questions in all. Select one question each From Section (A to D). Section E (Question no. 9) is Compulsory. Each Question is of 20 Marks.

Max Marks: 100
Time:3hrs

Section A

Q1:(a)	What is E-R Model? Construct an E-R Model for a University.	(10)
(b)	Broadly explain the concept of Database Design and Implementation.	(10)
Q2: (a)	Compare and contrast Physical and Logical Data Independence.	(10)
(b)	What is DBMS? Diagrammatically explain the Architecture of DBMS.	(10)

Section B

Q3: (a)	What is Locking? Discuss various Locking Methods.	(10)
(b)	Explain the concept of Normalization. Compare and contrast BCNF and 4NF with suitable examples.	(10)
Q4: (a)	What is Transaction? Write a short note on Transaction Management with SQL.	(10)
(b)	What is Concurrency? How Concurrency can be controlled?	(10)

Section C

Q5 :(a)	What is a Distributed Database Management System? Explain the Structure of DDBMS.	(10)
(b)	Distinguish Homogeneous and heterogeneous DDBMS.	(10)
Q6 :(a)	Compare and contrast DDBMS and Client/Server Architecture.	(10)
(b)	Write short notes on SPSD, MPSD and MPMD.	(10)

Section D

Q7: (a)	What is DSS? Broadly explain the importance of DSS.	(10)
(b)	What is Database Security? How Database can be secured?	(10)
Q8:(a)	What is OLAP? Explain the architecture of OLAP.	(10)
(b)	What are the various responsibilities of DBA?	(10)

Section E

(Compulsory Question)

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

(a) Structured Query Language (2)
(b) Lock Granularity (2)
(c) Deadlocks (2)
(d) De-Normalization (2)
(e) Two Phase Locking (2)
(f) Concurrency Control (2)
(g) Week Entity (2)
(h) Database Recovery (2)
(i) Time Stamping Method (2)
(j) Unique Key (2)

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