

Model Question Paper
Seventh Semester B. Tech Degree Examination
(2013 scheme)

13.706.5 Advanced Database Management System(R) (Elective-II)

Time: 3 Hrs

Max. Marks: 100

Part-A

Answer all questions.

1. What is a multidatabase system? Describe its reference architecture.
2. Discuss the four data allocation strategies.
3. Write a note on mobile databases.
4. Explain orthogonal persistence.
5. Briefly explain data mining.

(5 x 4 = 20 marks)

Part-B

Answer one full question from each module.

Module I

6. a) Explain the advantages and disadvantages of DDBMS. (15)
b) Discuss horizontal and vertical fragmentation techniques, with the help of examples. (5)

OR

7. a) Explain various levels of transparency in DDBMS. (15)
b) Explain the reference architecture of DDBMs. (5)

Module II

8. a) With state transition diagram, explain two-phase commit distributed recovery protocol. (15)
b) Discuss the locking protocols used in distributed serializability. (5)

OR

9. a) What is meant by distributed deadlock? Discuss the methods of deadlock detection with suitable examples. (10)
b) Write a note on distributed query optimization. (10)

Module III

10. a) Explain the advantages and disadvantages of using OODBMS. (15)
b) Explain how objects are stored in relational database. (5)

OR

11. a) Write notes on object definition language and object query language. (10)
b) Explain pointer swizzling techniques. (10)

Module IV

12. a) Explain the advantages and disadvantages of the web-DBMS approach. (10)
b) Explain data warehouse architecture. (10)

OR

13. a) Discuss the representation of multidimensional data and the operations supported by OLAP. (10)
b) Discuss the problems associated with developing and managing a data warehouse. (10)