Exam.Code:0004
Sub. Code: 0391

2071

B.A./B.Sc. (General) Fourth Semester

Computer Science

CS-07: Database Concepts

Time allowed: 3 Hours Max. Marks: 30

NOTE: *Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I -IV.*

x-x-x

UNIT – I

I. a) What is date independence? Explain types of date independence.

b) What are the differences between file system and DBMS approach? (2x3)

II. a) Discuss disadvantages of DBMS?

b) Explain characteristics of DBMS in detail. (2x3)

UNIT - II

III. a) What is ER model? Discuss by telling an example.

b) Explain Codd's 6 rules. (2x3)

IV. a) Explain network model of date?

b) What are integrity constraints? Explain by taking suitable examples. (2x3)

UNIT - III

V. a) Explain difference and projection operation in relation algebra.

b) What is storage organization for relation? (2x3)

VI: a) What is domain oriented relation calculus?

b) What is relation algebra? Explain Cartesian product and division operation? (2x3)

UNIT - IV

VII. a) What is 3 tier client server architecture?

b) Discuss normalization, 3NF, Boycee-code normal form. (2x3)

P.T.O.

VIII. a) What is normalization? Explain 1NF and 2NF.

b) Explain concurrency and recovery in database. (2x3)

UNIT - V

IX. a) Who is database administrator?

b) What is the difference between tuple and domain oriented relation calculus?

c) Explain distributed database. (3x2)

x-x-x