

Exam.Code:0030

Sub. Code: 0941

2071

Bachelor of Computer Application

Fourth Semester

BCA-16-405: Database Management System

Time allowed: 3 Hours

Max. Marks: 65

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. Explain three level architecture of Data base management system. (13)
- II. a) What is data independence? Explain logical and physical data independence.
b) Differentiate between File system and DBMS. (5,8)

UNIT - II

- III. Explain network and hierarchical models. (13)
- IV. a) Explain Codd's rules for an RDBMS.
b) Explain selection and projection operations used in relational algebra. (8,5)

UNIT - III

- V. a) Explain COMMIT and ROLLBACK in SQL with examples.
b) Explain difference between DELETE, DROP and TRUNCATE command with example. (5,8)
- VI. a) Explain the working of GROUP BY clause with suitable example.
b) Explain any three date functions. (7,6)

UNIT - IV

- VII. a) Explain block structure of PL/SQL.
b) Explain Equi join and Outer Join with example. (7,6)
- VIII. What is a database trigger? What are its various types? What functions are performed by triggers? Explain with suitable PL/SQL code. (2+5+3+3)

P.T.O.

(2)

UNIT - V

IX. Write a note on the following:-

- a) Foreign Key (2)
- b) Functional Dependency (2)
- c) Cursor (2)
- d) Advantages of PL/SQL (2)
- e) Aggregate function (3)
- f) ER Diagram (2)

x-x-x