



RE-1842

Second Year B. C. A. (Sem. III) Examination

April / May – 2010

302 - Database Management System

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृष्टावेव निशानीवाणी विगतो उत्तरवही पर अवश्य लपववी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
S.Y. B.C.A. (SEM. 3)

Name of the Subject :
302 - DATABASE MANAGEMENT SYSTEM

Subject Code No. : 1 8 4 2 Section No. (1, 2,.....) : NIL

Seat No. : [] [] [] [] [] [] [] [] [] []

Student's Signature

(2) Marks are indicated to the right side of question.

1 Answer following : 12

- (a) What is query processor?
- (b) What is Physical Data Modeling?
- (c) Describe multivalued dependencies.
- (d) What is logical Data Independence?
- (e) Define DBMS.
- (f) What is difference between drop and delete?

2 (a) Explain the process of normalization. Why normalization is essential? 8

OR

(a) Explain the concept of 3NF and BCNF. Provide appropriate example. 8

(b) Discuss the structure of DBMS. Explain its limitations and advantages. 7

OR

(b) Explain the significance of 'Multivalue dependency'. Describe it in detail. 7

(c) Discuss Data control statements and their functionality. 5

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[Contd....

- 3 (a) What is data dependency and functional dependency? 8
Describe their differences and functionality.

OR

- (a) Discuss concept of decomposition. Explain 8
characteristics of decomposition.
- (b) Discuss the concept of Data Abstraction in DBMS. 8
Provide appropriate example.

OR

- (b) What is difference between Data Generalization 7
and Data Specialization?
- (c) How data integrity can be maintained? 5

- 4 Answer following : (any two) 10

- (a) Data Consistency
(b) Data Abstraction
(c) Database integrity and security.

- 5 Consider following tables : 8

Employee (Emp-No, Emp-Name, Age, Date-of-Birth)

Salary (Emp-No, Date-of-joining, Total-salary)

Solve following queries : (any four)

- (i) Update 'Age' field considering current date.
(ii) Name the employee who is earning highest salary.
(iii) If retirement is 60 years, name the employees who will
retire in current year.
(iv) Name employees who earn more than 15,000.
(v) Name the employees whose age is above 40 years.
(vi) Name employees and their total salary.