



**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 दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.		Seat No. :	
Name of the Examination :		<input type="text"/>	
S.Y. B.C.A. (SEM. 3)		<input type="text"/>	
Name of the Subject :		<input type="text"/>	
302 - DATABASE MANAGEMENT SYSTEM		<input type="text"/>	
Subject Code No. : <input type="text"/> 1 <input type="text"/> 8 <input type="text"/> 4 <input type="text"/> 2		Section No. (1, 2,.....) : <input type="text"/> NIL	
		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 'Multivalued dependency'. Describe it in detail. 7
- (c) Discuss Data control statements and their functionality. 5

- 3 (a) What is data dependancy and functional dependancy? 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 aproprate 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.
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