P-3720

First Year B. C. A. (Sem. II) Examination

March / April – 2014

205 : Database Management System

Time : 3 Hours] [Total Marks : 70

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ F. Y. B. C. A. (SEM. 2)

Name of the Subject :

☛ 205 : DATABASE MANAGEMENT SYSTEM

☛ Subject Code No. : 3 7 2 0 ☛ Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

(2) Figure on the right indicate marks.

(3) Take assumption whenever necessary.

1 Answer following : (any **seven**) **14**

(i) Define Database.

(ii) Give difference between Total & Partial participation in a relationship.

(iii) What is the between Trivial & Non-Trivial dependencies.

(iv) Explain Prime & Non-Prime attributes.

(v) List various DCL commands.

(vi) What is Referential Integrity? How can we achieve it?

(vii) What do you mean candidate key?

(viii) What is the difference between physical and logical data independence?

2 Answer the following : (any **three**) **18**

(i) Define DBMS. Explain structural architecture of DBMS.

(ii) What is functional dependency? Explain types of functional dependency with an example.

(iii) Discuss the concept of Decomposition. Explain the desirable properties of decomposition.

(iv) What is purpose of mapping cardinality? Explain it with example.

3 Answer the following : (any **two**) **14**

(i) Explain Explain DDL and DML. Also list commands of both languages.

(ii) Write a note on various types of keys.

(iii) Differentiate between strong and weak entity set.

4 Answer the following : (any **two**) **14**

(i) Draw an E-R Diagram for Library Management System.

(ii) What is normalization? Explain upto 3rd normal form.

(iii) List & explain Armstrong's Axioms.

5 Write SQl statement to create these tables & solve the following Queries : **10**

RoomMaster (RoomNo, RoomType, Rate)

Customer (CustNo, CustName, City, RoomNo, Allocate_Date, Total_Days)

(i) Create table with appropriate constraints.

(ii) Find the Customers who are allocated Rooms of 'Super' type.

(iii) Display the room type which is used maximum.

(iv) Display Customers who have visited in last 15 days.

(v) Display total no. of customers who belong to Mumbai City.
