Model Question Paper

DIPLOMA IN COMPUTER ENGINEERING

Database Management Systems-I

Time : 3 Hour *Max.Marks : 75*

PART A

I.Answer all the following questions (9 x 1 = 9 Marks)

1	Define instance	M 1.01	R
2	List any two DBMS interfaces	M 1.02	R
3	Write the command used to change the definition of a base table	M 2.01	R
4	The keyword --------in the SELECT clause eliminates duplicate tuples from the result of an SQL query.	M 2.01	R
5	The --------is a concise description of the data requirements of the users.	M 3.01	R
6	The value of a --------- attribute is the concatenation of the values of its constituent simple attributes	M 3.02	R
7	--------- is the process of defining a set of subclasses of an entity type.	M 3.03	R
8	A--------- is a constraint between two sets of attributes from the database.	M 4.01	R
9	Define transaction.	M 4.04	R

PART B

II Answer any 8 questions from the following .Each questions carry 3 marks.

(8 x 3 = 24 Marks)

1	Explain logical and physical data independence	M 1.02	U
2	Illustrate referential integrity constraint with an example	M 1.03	U
3	Explain network data model	M 1.01	U
4	List any three applications of database	M 1.01	R
5	Consider the relation Employee Eid | FName | LName | Salary | DeptNo Build SQL query to retrieve a.All employees who work in Department number 7 b.The salary of every employee	M 2.01	A
6	Demonstrate Assertions in SQL.	M 2.02	U
7	Explain Views in SQL with an example	M 2.02	U
8	List the three SQL commands for data definition	M 2.01	U
9	Explain the naming conventions of schema constructs	M 3.02	U
10	Apply 2 NF in the following relation Employee_Project with		

	primary key-SSN & PNo SSN | PNo | Hours | EName | PName | PLocation	M 4.02	A

PART C

Answer ALL questions. Each carries 7 marks. (6 x 7 = 42 Marks)

III	Explain three schema DBMS architecture with a neat diagram OR	M 1.02	U
IV	Classify the different types of individuals interact with databases	M 1.01	U
V	Explain SQL data types for attributes in a schema	M 2.01	U
VI	OR Explain triggers in SQL	M 2.02	U
VII	Illustrate attribute types in the ER model with examples OR	M 3.02	U
VIII	Explain the concepts of generalization and specialization in EER model	M 3.03	U
IX	Build an E-R diagram corresponding to the relation:Student(RollNo(primary key),Name,DOB,PhoneNo,Age(derived attribute)and Address(composite attribute)	M3.05	A
X	OR Explain the use of High level Conceptual Data Model for Database Design	M3.01	U
XI	Illustrate the states of transaction execution with a neat diagram OR	M4.03	U
XII	Explain the need for normalization in databases	M4.02	U
XIII	Demonstrate 3NF with an example OR	M4.02	U
XIV	Outline the advantages of mobile databases	M4.05	U

Mark Distribution

Module	Hrs/Module	Marks/Module (hi/∑Hi)*123(±5%)	Types of Questions							
			Part A		Part B		Part C		Total	
			No of Questions	Marks	No of Questions	Marks	No of Questions	Marks	No of Questions	Marks
1	10	30	2	2	4	12	2	14	7	28
2	11	31	2	2	4	12	2	14	7	28
3	11	31	3	3	1	3	4	28	9	34
4	11	31	2	2	1	3	4	28	8	33
Total	43	123	9	9	10	30	12	84	31	123

Cognitive Level Mark Distribution

Cognitive Level	Marks	% of Marks
Remembering	12	10
Understanding	98	80
Applying	13	10
Analysing		
Evaluating		
Creating		
Total	123	100