Unit-IV

8. (a) Describe data definition and manipulation (DDL and DML) statements in SQL. 8

(b) What is a view in SQL? Write its advantages. 7

9. (a) Write the functions of the following: 8

Clauses in the SELECT statement with example

FROM GROUPBY SELECT

WHERE HAVING ORDER BY

(b) Consider the following relational database :

Employees (eno, ename, address, basic_salary)

Projects (pno, pname, eno)

Workin (pno, eno, pjob)

Write SQL queries for the following:

(i) Give names of employees who are working on all projects

(ii) Give names of the projects which are currently not being worked upon.

A (Printed Pages 4)

Roll No. _____

SFS-4695

B.C.A. (Semester-II) Examination, May 2015

(Old Course)

Introduction to DBMS-SQL

(BCA-203)

Time Allowed : Three Hours] ***[Maximum Marks : 100***

Note : Answer five questions in all. Question No.1 is compulsory. Attempt one question from each unit.

1. Write short answer of the following: 4×10=40

(a) Define the terms data and information.

(b) What are the different ways of preventing open access to the internet.

(c) What is the use of ER-model?

(d) What are integrity constraints?

(e) Write SQL Commands :

(i) to specify a view

(ii) for deleting a view

(f) What is normalization?

(g) Discuss 1NF, 2NF, 3NF and BCNF

(h) What are weak and strong entities.

(i) Write in brief about database recovery tools.

(j) Explain the following commands - Alter, Update, Delete, Grant.

Unit - I

2. (a) What are the main functions of a database administrator? 8

(b) Write the characteristic features of DBMS and RDBMS. 7

3. (a) Explain a data dictionary. Write its advantages and disadvantages. 8

(b) Define the following terms : 7

(i) Refrential integrity

(ii) Foreign key

(iii) Candidate key

(iv) Primary key

Unit - II

4. (a) Explain in detail the hierarchical data model. 8

(b) Explain ANSI/SPRC 3-level architecture with the help of diagram. 7

5. (a) Compare Network and Relational models. 8

(b) Explain the need for three-level architecture. 7

Unit - III

6. (a) Differentiate between Random-file and Multikey file organization techniques. 8

(b) What is file organization and what are the essential factors to be considered in file organization. 7

7. (a) Compare and contrast the traditional file based system with Database approach. 8

(b) Describe the main features of ER-model with the help of a diagram. 7