

2017

M.Sc.

2nd Semester Examination

COMPUTER SCIENCE

PAPER—COS-205

(PRACTICAL)

Full Marks : 50

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Group-A

Answer any one question : 1×20

1. Consider the following relational database :

Employee (e_name, street, city)

Works (e_name, company_name, salary)

Company (company_name, city)

Managers (c_name, manager_name)

(Turn Over)

Write SQL query for the following :

- (a) Find the name of all employee who worked for UCO Bank.
- (b) Find the company that has the maximum employees.
- (c) Find all employee who live in the same city as the company they work for.

2. Consider the relational database :

Project (P_no, P_name, chief_architech)

Employee (E_no, E_name)

Assign_to (P_no, E_no)

Write SQL query for the following :

- (a) Find the details of employee working on project name 'system'.
- (b) Get details of employee working on both projects P_200 and P_300.
- (c) Find the number of employee who work on all projects.

3. Consider the relational database :

Supplier (S#, Sname, city, status)

Parts (P#, PName, colour, Weight, city)

SP (S#, P#, quantity).

Write SQL query for the following :

- (a) For all parts, get part number and weight of that part.
- (b) Get all combinations of supplier and part that both are co-located.
- (c) Get the total number of suppliers.

Group-B

Answer any *one* question :

1×20

1. Write a PL/SQL program to implement a calculator that supports only addition, subtraction, multiplication and division.
2. Write a PL/SQL program to add first n natural numbers.
3. Write a PL/SQL program to obtain details of employee drawing minimum salary. Add his details into table

new_sal (emp_no, e_name, salary) after increasing salary by Rs. 500.

4. Write a PL/SQL program that first insert a record in EMPLOYEE table, update the salary of employee 'A' by adding Rs. 3000. If the total salary is greater than Rs. 20,000, then undo the update.
5. Write a PL/SQL program that takes two number and if a number is greater than other, it swaps the two numbers otherwise double them.
6. Write a PL/SQL program to increase salary of an employee by 5% whose salary is more than Rs. 3000. Get emp_no from user.
7. Write a PL/SQL program that reads a complete record for a given employee (EMPLOYEE table) in a user defined record variable. If the salary of an employee is more than Rs. 8,000, then the employee's name and salary are displayed. [EMPLOYEE (E_id, name, salary)].

PNB : 5 marks

Viva Voce : 5 marks
