## U.G. 6th Semester Examination - 2022 COMPUTER SCIENCE [PROGRAMME] Skill Enhancement Course (SEC) Course Code : COM.SC-G-SEC-P-604 MySQL Programming Lab. (using SQL/PL-SQL) [PRACTICAL]

Full Marks : 40

Time : 4 Hours

Answer any one question.

Marks Allotment :

Experiment : 30, Viva voce : 10

- 1. Write a PL/SQL program to add two numbers.
- 2. Write a PL/SQL program to reverse a number.
- 3. Write a PL/SQL program to find the factorial of a number.
- 4. Write a PL/SQL program to check number is Odd or Even.
- 5. Write a PL/SQL program to program to swap two numbers.
- 6. Write a PL/SQL program to reverse a string.

- 7. Write a PL/SQL program to find greatest of three numbers.
- 8. Write a PL/SQL program to check whether a number Palindrome or not.
- 9. Write a PL/SQL program to print Fibonacci series up to N terms.
- 10. Write a PL/SQL program to find sum of digits of a given number.
- Consider the database schema Employee(Eid, Name, Depid, Qualification, Sec), Salary(Eid, Basic, D.A. HRA, Bonus) and write SQL queries for the following:
  - a) To display the frequency of employees department wise.
  - b) To list the names of those employees only whose names start with 'H'.
- 12. Consider the database schema Employee(<u>Eid</u>, Name, Depid, Qualification, Sec), Salary(Eid, Basic, D.A. HRA, Bonus) and write SQL queries for the following:
  - a) To add a new column in salary table. The column name is Total\_Sal.
  - b) To store the corresponding values in the Total\_Sal column.

[Turn over]

- 13. Consider the database schema Personal(<u>Empno</u>, Name, DOB, Native\_place, Hobby), Job(<u>Sno</u>, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) To show empno, name and salary of those who have Sports as hobby.
  - b) To show youngest employee from each Native place.
- 14. Consider the database schema Personal(<u>Empno</u>, Name, DOB, Native\_place, Hobby), Job(<u>Sno</u>, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) Show number of employees area wise.
  - b) Increase salary by 5% of their present salary of the employees having hobby as Music or who have completed at least 3 years of service.
- 15. Consider the database schema Personal(<u>Empno</u>, Name, DOB, Native\_place, Hobby), Job(<u>Sno</u>, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) Show the salary expense with suitable column heading of those who shall retire after 20-jan-2026
  - b) Show the hobby of which there are 2 or more employees.

(3)

- 16. Consider the database schema Personal(<u>Empno</u>, Name, DOB, Native\_place, Hobby), Job(<u>Sno</u>, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) Show Sno, Name, Hobby and Salary in decreasing order of Salary.
  - b) Show how many employee shall retire today if maximum length of service is 20 years.
- 17. Consider the database schema Personal(Empno, Name, DOB, Native\_place, Hobby), Job(Sno, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) Show those employee names and DOB who have served more than 17 years as on date.
  - b) Show names of those who earn more than all of the employees of Sales dept.
- 18. Consider the database schema Personal(<u>Empno</u>, Name, DOB, Native\_place, Hobby), Job(<u>Sno</u>, Area App\_date, Salary, Retd\_date, Dept) and write SQL queries for the following:
  - a) Show appointment date and native place of those whose names start with 'A' or end in 'd'

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- b) Show additional burden on the company in case salary of employees having hobby as sports, is increased by 10%.
- 19. Consider the database schema Sender(<u>SenderID</u>, SenderName, SenderAddress, SenderCity), Recipient(<u>RecID</u>, SenderID, RecName, RecAddress, RecCity) and write SQL queries for the following:
  - a) Display the name of all Senders from Mumbai.
  - b) Display the RecID, SenderName, SenderAddress, RecName, RecAddress for every Recipent.
- 20. Consider the database schema Sender(<u>SenderID</u>, SenderName, SenderAddress, SenderCity), Recipient(<u>RecID</u>, SenderID, RecName, RecAddress, RecCity) and write SQL queries for the following:
  - a) Display recipient details in ascending order of RecName.
  - b) Display number of recipients from each city.
- 21. Consider the database schema Cabhub(Vcode, VehicalName, Make, Color, Capacity, Charges), Customer(<u>CCode</u>, Cname, VCode) and write SQL queries for the following:
  - a) Display the names of all the white colored vehicles.

(5)

- b) Display name of vehicle, make and capacity in the ascending order of their seating capacity.
- 22. Consider the database schema Cabhub(Vcode, VehicalName, Make, Color, Capacity, Charges), Customer(<u>CCode</u>, Cname, VCode) and write SQL queries for the following:
  - a) Display highest charges at which a vehicle can be hired from Cabhub.
  - b) Display the customer name and the corresponding name of vehicle hired by them.
- 23. Consider the database schema Doctor(ID, Name, Dept, Sex, Experience), Salary(ID, Basic, Allowance, Consultation) and write SQL queries for the following:
  - a) Display name of all doctors who are in "Medicine" dept. having more than 10 years of experience from the table doctor.
  - b) Display the average salary of all doctors working in "ENT" dept. using the tables doctor and Salary. Salary = Basic + Allowance.
- 24. Consider the database schema Doctor(<u>ID</u>, Name, Dept, Sex, Experience), Salary(ID, Basic, Allowance, Consultation) and write SQL queries for the following:

- a) Display the minimum allowance of female doctors.
- b) Display the highest consultation fee among all male doctors.
- 25. Consider the database schema Flights(Fl\_no, Starting, Ending, No\_Flights, No\_stops), Fares(Fl\_no, Airlines, Fare, Tax%) and write SQL queries for the following:
  - a) Display Fl\_no and No\_Flights from "Kanpur" to "Bangalore".
  - b) Display Fl\_No and fare to be paid from the flights from "Delhi" to "Mumbai", where the fare to be paid = Fare + Fare \* (Tax% / 100).