U.G. 6th Semester Examination - 2021 COMPUTER SCIENCE [PROGRAMME] Skill Enhancement Course (SEC) Course Code : COM.SC-G-SEC-P-604/PR (MySQL Programming Lab.) [PRACTICAL]

Full Marks : 40

Time : 4 Hours

Answer any **one** question.

Marks Allotment :

Experiment : 30, Viva voce : 10

1. Create the following database defined below:

STU_DETAILS (ENO, SNAME, DOB, ADDR1, ADDR2, CITY, COUNTRY)

MARK_DETAILS (ENO, MARKS1, MARKS2, MARKS3, TOTAL)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

a) Display the name of the student who scored the highest TOTAL.

[Turn over]

- b) Display the MARKS1 of all the students.
- c) Display the ENOs of all the students who has scored >50 in MARKS2.
- 2. Create the following database defined below:

Personal(Empno, Name, DOB, Native_place, Hobby) Job(Empno, Area App_date, Salary, Retd_date, Dept) Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) Show the area-wise number of employees.
- 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.
- c) To Show empno, name and salary of those who have Sports as hobby.
- 3. Create the following database defined below:

Personal(Empno, Name, DOB, Native_place, Hobby) Job(Empno, Area App_date, Salary, Retd_date, Dept) Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer

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the following queries using SQL:

- a) To show youngest employee from each Native place.
- b) Show those employee name and DOB who have served more than 17 years as on date.
- c) Show names of those who earn more than all of the employees of Sales dept.
- 4. Create the following database defined below:

ROUTE (ROUTE_ID, ROUTE_NO, CATEGORY_CODE, ORIGIN, DESTINATION, FARE, DISTANCE, SEATING_CAPACITY)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) To display the ROUTE_ID and ROUTE_NO whose FARE > 400.
- b) To display the SEATING_CAPACITY for any particular ROUTE_ID.
- c) Display all the types of CATEGORY_CODE.
- 5. Create the following database defined below:

BOOK (ISBN, TITLE, AUTHOR, PUBLISHER, YEAR, PRICE)

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Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) Create a view to see only the ISBN, TITLE and PUBLISHER.
- b) Get the names of all the books whose price is greater than Rs. 250/-.
- c) Sort the table using the YEAR field in ascending order.
- 6. Create the following database defined below:

Sender (SenderID, SenderName, SenderAddress, SenderCity)

Recipient (RecID, SenderID, RecName, RecAddress, RecCity)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) Display the name of all Senders from Mumbai.
- b) Display the RecID, SenderName, SenderAddress, RecName, RecAddress for every Recipent.
- c) Display number of recipients from each city.

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7. Create the following database defined below:

TEACHER (ID, Name, Dep_ID, Subject, Experience_in_years)

DEPARTMENT (Dep_ID, D_Name, Address, City)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) List the addresses of all the "Physics Department" in city "Delhi".
- b) Add column Date_of_Birth in the TEACHER table.
- c) Display the names and addresses of all the teachers of "Computer Science" who work for "Dep_ID = 110011".
- 8. Create the following database defined below:

STUDENT (SNAME, ENROLLNO, SEMESTER, BRANCH_OF_ENGINEERING, ADDRESS_1, ADDRESS_2, CITY, STATE, MOBILE, EMAIL_ADDRESS, PIN-CODE)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer

the following queries using SQL:

- a) Display all the records which doesn't have a mobile number.
- b) Sort all the records as per SNAME alphabetically.
- c) Display all the records who are in 3rd semester of computer science branch.
- 9. Create the following database defined below:

CUSTOMER (CUSTOMER_NAME, CUSTOMER_ID, ADDRESS_I, ADDRESS_II, MOBILE NO, EMAIL_ADDRESS, PRODUCT_PURCHASED, PRODUCT_CODE, PRICE, WARRANTY_NO_OF_YEARS, DATE-OF_PURCHASE, PRICE)

Select an appropriate primary key. Input at least 10 meaningful records. Select appropriate data types for all the fields. For the above tables designed, answer the following queries using SQL:

- a) Display the CUSTOMER_ID of customer name 'Sri Ashok Kumar'.
- b) Display all the PRODUCTS purchased on 26th April, 2013.
- c) Display all the PRODUCTS whose PRICE is less than Rs. 10,000/- and purchased on 26th April, 2013.