2019

Part – II

COMPUTER SCIENCE

(General)

Paper – IIB

(Practical)

(Set – II)

Full Marks – 50

Time : 2 Hours

*The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in
their own words as far as practicable.*

Answer any **one** question (on lottery basis) :

40 ×1

1. Consider the following tables :

    Teacher (<u>Teacher ID</u>, Name, Department, Year_of_Experience)

    Subject (Subject ID, Subject_Name, Semester, Teacher_ID)

    Using SQL, perform the following operations.

P.T.O.

(a) Create the above detabase tables and insert some records in the tables.

(b) List the name and year of experience of all the teachers of 'Physics' department.

(c) List the names of the teachers department wise.

(d) Find the names of the teachers who teach more than one subject.

(e) Find the name of the teacher who has the highest experience.

2. Consider the following tables :

Student (<u>Roll No</u>, Name, Date_of_Birth, Address) Marks (<u>Roll No</u>, Marks_in_Physics, Marks_in_Chemistry, Marks_in_Mathematics, Total_Marks)

Using SQL, perform the following operations.

(a) Create the above database tables and insert some records in the tables.

(b) Display the details of the student who has obtained the highest total marks.

(c) List the names of the students who scored more than 50 in Physics but less than 50 in Chemistry.

Contd.

(d) Find the name of the youngest student.

(e) Add a column average with appropriate data type in the marks table.

3. Consider the following tables :

Workshop (<u>Participant ID</u>, Participant_Name, Institution, Designation, Address, Amount_of_ Fees_Paid) Using SQL, perform the following operations.

(a) Create the above database tables and insert some records in the tables.

(b) Display the details of all the participants with designations 'Student' and who are from 'Midnapore'.

(c) Calculate the total amount paid by all the participants.

(d) Group the names of the participants desig-nation wise.

(e) Add a column 'Date_of_Registration' of type date in the above table.

4. Consider the following tables :
Customer (<u>Customer ID</u>, Name, Age, Address)
Loan (<u>Loan ID</u>, Amount, Custid, EMI)
Using SQL, perform the following operations.

(a) Create the above database tables and insert some records in the tables.

(b) List the name of the customers who have not taken any loan.

(c) Find the name of the Customer who has taken maximum amount of loan.

(d) Find the total number of loans availed.

(e) Calculate the average loan per customer.

5. Consider the following tables :

Book (Acc No, Title, Author, Publisher, Price)

Using SQL, perform the following operations.

(a) Create the above database tables and insert some records in the tables.

(b) Find the details of the book with second highest price.

(c) In descending alphabetical order, list the names of the authors whose names do not start with 'R' or 'S'.

(d) List the names of the publishers who have not published any book of 'Rabindranath Tagore'.

(e) Add a column 'Date_of_Purchase' of data type 'data' in the above table.

6. Consider the following tables :

   Flight (<u>Flight No</u>, Source, Destination)

   Passenger (<u>Passenger ID</u>, First_Name, Last_Name)

   Journey (Passenger_ID, Flight_No, Date_of_ Journey)

   Using SQL, perform the following operations.

   (a) Create the above database tables and insert some records in the tables.

   (b) List the passengers who have travelled from 'Kolkata' to 'Chennai'.

   (c) List the names of the passengers, who have taken flights on 24th May, 2019.

   (d) List the names of the passengers who have been never boarded on the flight with flight number A11234.

   (e) Add a column 'Age' of data type integer in the passenger table.

7. Consider the following tables :

   Product (<u>Product ID</u>, Product_Name, Price_per_Unit, Stock)

   Sales (Sales ID, Product_ID, Quantity)

   Using SQL, perform the following operations.

(a) Create the above database tables and insert some records in the tables.

(b) Display the name of the product which has the lowest stock.

(c) Calculate the total sales amount of products sold with Product_ID 100.

(d) List product names in descending order with respect to their price per unit.

(e) Add a column 'Expiry_Date' of data type date in the product table.

Viva-voce : 5 Marks

Practical Note Book : 5 Marks