

**NEW**  
**Part-III 3-Tier**  
**2018**  
**COMPUTER SCIENCE**  
**PAPER—VIII (SET — 1)**

**(Honours)**

**(PRACTICAL)**

*Full Marks : 50*

*Time : 3 Hours*

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

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

Answer any *one* question from Group—A &  
any *one* question from Group—B.

**DBMS**

*(Marks : 50)*

Answer any *two* questions (Lottery basis) : 2×20

1. Consider the following database :

PRODUCT (MAKER, MODEL, TYPE)

*(Turn Over)*

PC (MODEL, SPEED, RAM, HD, CD, PRICE)

LAPTOP (MODEL, SPEED, RAM, HD, CD, PRICE)

PRINTER (MODEL, COLOR, TYPE, PRICE)

- (a) Create the tables and insert sufficient records. PC model should start with 'P' and Laptop with 'L' and Printer with 'PR'.
  - (b) List the model of PC having the same speed and same amount of RAM (each pair should occur once).
  - (c) Find average Hard disk of a PC for all these manufacturer that make partners.
  - (d) Find the second highest price of printer.
  - (e) Reduce the price of laptop by 20% having MODEL is ABCDE12.
2. Consider the following :
- Employee (ename, street, city)  
 Works (ename, salary)  
 Company (ename, city)  
 Managers (ename, Manager\_name)
- (a) Create the above schema
  - (b) Find the company that has the smallest payroll.
  - (c) Find the names of all employees who work for IBM.
  - (d) Delete all tables in the works relation for employees of TCS.
  - (e) Find all employees who earn more than the average salary of all employees of their company.

3. Consider the following a database :

Suppliers (s\_id, s-name, address)

Parts (p-id, p-name, color)

Catalog (s-id, p-id, cost)

(a) Create the above database using SQL.

(b) Find all suppliers name who supply a 'rod' whose price is under Rs. 100 or whose colors is 'brown'.

(c) Find parts numbers of part supplied by at least two different suppliers.

(d) Find the suppliers name who supply 'cement' but not rod.

4. Consider the following database.

hotel (h\_no, h\_name, h\_address)

room (r\_no, h\_no, r\_type, r\_charge)

booking (h\_no, g\_no, r\_no, date\_from\_date\_to)

guest (g\_no, g\_name, g\_address)

(a) Create the above database using SQL.

(b) Display the details of all rooms at the 'Taj Hotel'.

(c) Display the details of the hotel on h\_no is 1003.

(d) Display the details of all guests including hotel name.

(e) Display the guests name and address who staying at 'Hindustan Hotel'.

5. Consider the following schema of a relational database :

branch (branch\_name, branch\_city, assets)

account (account\_number, branch\_name, balance)

depositor (customer\_name, account\_number)

customer (customer\_name, customer\_street,  
customer\_city)

loan (loan\_number, branch\_name, amount)

borrower (customer\_name, loan\_number)

- (a) Create tables through appropriate SQL command, define all integrity constraints and enter sufficient data.
- (b) Find the names of all customers who have either an account or a loan or both.
- (c) Find the names of all branches that have assets greater than those of at least one branch located in 'Contai'.
- (d) Find all customers who have an account at all branches located in 'Tamluk'.
- (e) Find the average account balance of those branches where the average account balance is greater than \$1000.

Practical Note Book : 05

Viva : 05