OLD

Part–III 3-Tier

2017

COMPUTER SCIENCE

PAPER—VIIIA (SET—2)

(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.

Group—A

Answer any *one* question. 1×20

1. Consider the following relational schema :

Employee (person_name, street, city)

Works (person_name, company_name, salary)

Company (company_name, city)

Managers (person_name, manager_name)

(a) Find the company with the most employees.

(b) Find the company with the smallest payroll.

(c) Find those companies whose employees earn a higher salary on average, than the average salary at First bank corporation.

(d) Find the names and cities of residence of all employees who work for First bank corporation.

(e) Find the names of all employees who work for First bank corporation.

2. Consider the following database :

Sales_person (ssn, name, start_year, dept_no)

Trip (ssn, from_city, to_city, departure_date, return_date, trip_id)

Expense (trip_id, account_no. amount)

(a) Find the person with maximum number of trips in the last 5 years.

(b) Find the most expensive and least expensive trips.

(c) Find the person going maximum number of times on trips.

(d) Find the average expenditure of trips involving amount more than 2000.

(e) Find the department of person spending maximum *amount* on a trip.

3. Consider the following schema :

Emp (e_no, e-name, address, city, basic_sal, job_status)

Projects (p_no, p_name, p_category)

Work (p_no, e_no, p_duration)

Write the following queries in SQL :

(a) Create the above schema and insert some records.

(b) Display the names of employees who are working in project 'DBMS'.

(c) Find he employer number of all employees who are working on atleast one project.

(d) Find the average salary of all employees working in a project based in Kolkata.

(e) Add the attribute to the table projects.

4. Consider the following schema :

Employee (emp_id, f_name, L_name, address, dob, sex, position, dept_no)

Department (dept_no, dept_name, mgr, emp_id)

Project (proj_no, proj_name, dept_no)

Work on (emp_id, proj_no, hours_worked)

Write the following queries in SQL :

(a) Create the above schema and insert some records.

(b) List the name and addresses of all employees who work for the IT department.

(c) List the total hours worked by each employee, arranged in order of department number and within department, alphabetically by employee surname.

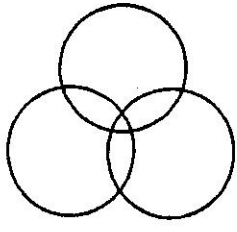
(d) List the total number of employees in each department for those departments with more than 10 employees.

(e) List the project number, project name and the number of employees who work on that project.

Group—B

Answer any *one* question : 1×10

5. Design the following diagram using Brasenham circle drawing algormithm.



6. Write a program to reflect a traingle respect to X–axis.

7. Write a program to draw a square using DDA algorithm.

8. Assume ellipse using midpoint *ellipse drawing* algorithm.

Group—C

Answer any *one* question : 1×10

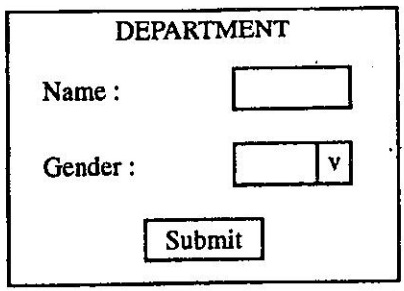
9. Write a HTML code for the following table :

enter,gray

	Address		
Name	Vill	P.O.	Dist
Dulal	Kol	Mid	Medinipur

Center, yeallow

10. Write the HTML code to implement the following web page :



11. Design a web site of your department which will show a list of teacher, student in each section their will be a photo gallery and admission notification.

Practical Note Book	:	**05**
Viva	:	**05**

OLD

Part–III 3-Tier

2017

COMPUTER SCIENCE

PAPER—VIIIB (SET—2)

(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 *two* questions taking *one* from each group.

Group—A

(*Marks : 20*)

1. Write an assembly language program to find the third highest number from a set of data.

2. Write an assembly language program to count the number of zeros, even and odd number. The data are stored in memory locations at XX50H to XX5FH.

3. Write an assembly language program to find the square root of an 8 bit number.

4. Design an even parity code generator.

5. Write a program for 8085 Microprocessor to create Fibonacci series up to a given range.

6. 8 bit data are stored in memory locations starting at XX50H. Transfer the entire block of data in reverse order to memory location starting at XX70H.

7. A set of eight data bytes is stored in memory location starting at XX50H which each data butes for bits D_7 and D_0. If D_7 or D_0 is 1, reject the data byte. Otherwise store the data bytes at memory locations starting at XX60H. Data (H) : 80, 62, E8, F2, 35, F1, 58, 52.

8. Write a program to subtract two 16 bit numbers with Borrow.

9. Write an assembly language program that will compare three numbers and will find out the smallest one.

10. *Write a program* to add the following data byte stored in memory locations starting at XX60H and *display the sum* at XX70H if the sum does not generate a carry. If a result generates a carry, stop the addition and display 01H at XX70H.

Date (H) : First set : 37, A2, 78, 97, 14

Second set : 42 1B, 12, 39, 07

Group—B

(*Marks : 20*)

1. Write an ALP to interface 7 segment display with 8085 using 8255 and display 'TOPOLOGY'.

2. Write ALP to generate a square wave using 8255. use CRO to show the wave.

3. Design and write an assembly language programm to show 0 to 9 using 7-segment display and delay between each number should be 10 sec.

4. Design a digital clock using 8085 Microprocessor and 8255IC.

Practical Note Book	:	**05**
Viva	:	**05**

———