

2023

COMPUTER SCIENCE — HONOURS — PRACTICAL

Paper : CC-11P

Full Marks : 30

Batch - IIAnswer *any one* question.**Marks Distribution :**

Database creation and Tuple insertion :	5
Database connection :	2
SQL Query :	2×3 = 6
HTML/PHP Code (Front End) :	4
Front End Output :	3
Sessional :	4
Viva voce :	6
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	30

1. Design a Library Management System having following database :

Book (*Bid*, *Btitle*, *Author*, *Subject*)

Student (*Sid*, *Sname*, *City*, *Phone*, *Year*)

Borrows (*Bid*, *Sid*, *Issue_date*, *Return_date*)

(a) Create the above relation in MySQL specifying integrity constraints and year in student relation should be between 1 to 3.

Insert sufficient records in each table so that following queries yield some result.

(i) List all books which have never been borrowed in year 2023.

(ii) List all the books of DBMS that has been borrowed by Vishal Sinha in the month of December 2023.

(b) (i) Use PHP to insert data in the table 'Book'.

(ii) Delete all the records of the students not living in Kolkata.

2. Design the following database for 'Result Management'

Student (*Roll*, Name, City, Phone_number)

Subject (*Scode*, Sname, Full_Marks, Pass_Marks)

Result (*Roll*, *Scode*, Marks)

(a) Create the above tables in MySQL with following and other integrity constraints :

- Full_Marks, Pass_Marks and Marks should be non-negative.
- Pass_Marks should be at least 30% of Full_Marks.

Insert sufficient records in each table so that following queries yield some result.

- (i) For each subject show subject name and number of students passed.
- (ii) For each student show Name and Marks in the descending order.

(b) Use PHP to perform the following operations :

- (i) Display the names of students residing in Patna.
- (ii) Delete a record from the 'Subject' table, where Full_Marks is not less than 75.

3. Design the following database for 'Project Management' :

Emp (*Ecode*, Ename, Grade, Basic_Pay)

Project (*Pcode*, Pname, Leader_id)

Works (*Ecode*, *Pcode*, Hours_worked)

Leader_id is Ecode of the employee acting as project leader.

(a) Create the above relation in MySQL with sufficient records specifying integrity constraints. Perform the following operations using MySQL :

- (i) Delete the record of those employees from 'Emp' table who have so far worked for none of the projects.
- (ii) For each project show the project name and number of Grade-A employees working in the project.

(b) Use PHP to perform the following operations :

- (i) Insert a new record in the 'Emp' table.
- (ii) Display the 'Project' table in tabular format.