Nirma University
Institute of Technology
Semester End Examination (IR), May - 2019
B. Tech. in Computer Engineering / Information Technology, Semester-VI
CE651 LAMP Technologies

Roll / Exam No. [   ]   Supervisor's initial with date [   ]

Time: 3 Hours   Max. Marks : 100

Instructions:
1. Attempt all questions.
2. Figures to right indicate full marks.
3. Use section-wise separate answer book.
4. Draw neat sketches wherever necessary.

Section – I

Q:1 **Answer the following** [20]

(A) CO1,BL2 Discuss the various benefits of LAMP Technologies as compare to proprietary technologies. 04

(B) CO2,BL1 Differentiate echo and print statements with an example. 04

(C) CO2,BL2 What is the significance of variable scope in PHP? Exemplify various types of variable scope in PHP with required code snippets. 06

OR

(C) CO2,BL2 How to define constant in PHP? Write down difference between variable and constant. Demonstrate constant with an example. 06

(D) CO2,BL1 What is the significance of introspection functions in PHP? Demonstrate interface_exists() and get_class_vars() functions using required code snippets. 06

OR

(D) CO2,BL1 How to pass variable as "Pass by reference" in PHP user defined function? Demonstrate with an example. 06

Q:2 CO2,BL3 **Answer the following** [18]

(A) Implement an interface "IAccount" with following method: 08
1. deposit(account_number, deposit_amount)
2. withdraw(account_number, withdraw_amount)

Create a class "Account" with data members account_number and balance. Implement "IAccount" interface in Account class. Minimum account balance is 5000 rupees. Initialize Account class object using concept of constructor. Create an Account class object which perform deposit and withdraw operations several time. Display balance after every deposit or withdraw operation.

(B) Write a code to design a web page in PHP with HTML form which allows user to upload file in "Album" directory with following restrictions: 10
1. Only image files can be uploaded.
2. File size should not exceed 512KB.
3. If file exist in directory than it should overwrite the previous file on server.

Q:3 Design PHP page for following scenario: [12]
CO3,BL6 Web page contains two text fields and process button as mentioned
CO4,BL6 below:

Employee	EmployeeNumber|Complete Name
Address	Flat Number,Flat Name,Near landmark,Pin code

| Process |

User enter the data in format specified as per text field.
Once we click on process button, it will produce the following output:

Employee Number: X-X
First Name: X-X   Middle Name: X-X   Last Name: X-X
    Address: Flat Number (enter by user),
                  Flat Name (enter by user),
                  Near landmark (enter by user),
                  City Name (write code to find it),
                  Pin code (enter by user)

Here, X-X indicates data enter by the user.
Implement following constraints while process or display the output:
- Trim the white space before processing text fields.
- For First Name, Middle Name and Last Name, first character of every name string must in uppercase.
- Find the city name from pin code enter by the user using array handling concepts and functions.
- Use $_GET superglobal variable in code also.

Write down efficient code using appropriate string and array handling functions of PHP.

Section – II

Q:4 **Answer the following** [20]
(A) How to pass user credentials from one PHP page to another PHP 06
CO2,BL2 page using cookie concept? Demonstrate with an example.

OR

(A) Exemplify different error handling methods with require code 06
CO2,BL1 snippets.
(B) Write a code to design a web page in PHP with HTML form which 06
CO4,BL6 include text input fields Roll Number, Name, Department and one
button field Add. The file "Students.dat" is used to store student
data. Once, we click on add button, data entered by the user is
appended in "Students.dat" file.

OR

(B) Write a PHP script to perform following operations on file: 06
CO4,BL6   1. Copy the contents from one file to another file line by line
using file handing functions.
  2. Count and display the number of lines copied.

(C) Write down client server programs using PHP socket programing 08
CO4,BL6 functions for the followings:
  1. Client sends string message to the server. Once client receives
response from the server, it displays output to the user.
  2. Server reverses the received string message from client and
sends response to the client.

Consider following database structure and hint required in Question 5 and 6:

Database structure:

An organization have a database named **CustomerInfo** and tables named **customer** and **customerDelete** which have following attributes:

customer table: customerID (Primary key), accountNumber, accountType, name, password, balance

customerDelete table: customerID (Primary key), accountNumber, accountType, name, password, balance

Assume suitable data type for the above attributes.

Hint:

Include DBConnection Page to any other web page whenever database connection required using PHP require statement.

Q:5 CO3,BL6 CO4,BL6	Design PHP pages with HTML form for following functionalities:	[18]

1. DBConnection Page: Connection Code for the database.
2. DeleteCustomer Web Page: Delete the customer record using CustomerID and accountType fields from the database table customer and validate attributes as mentioned below using PHP validation function(/s) only:
   i) CutomerID in format: CUSTID<4 digits> (i.e. CUSTID0001)
   ii) accountType attribute is required field.
3. Write down database trigger for delete operation on customer table. Once we delete the record from customer table, deleted record is inserted in customerDelete table.

Q:6 CO3,BL6 CO4,BL6	Design PHP pages with HTML form for following functionalities:	[12]

1. Custom Exception Class to display customize error message for accountType attribute.
2. DisplayCustomerInfo page: Web page display customer(s) information based on accountType entered by user. Web page has two fields:
   i) accountType Text Field: To enter account type from user and value is either SAVING or CURRENT
   ii) Search Button: To display all details of customer(s) in tabular format as per data entered in accountType Text Field

   If user enters accountType in incorrect format then display appropriate message using custom exception class.