



# COVENANT UNIVERSITY

CANAANLAND, KM 10, IDIROKO ROAD  
P.M.B 1023, OTA, OGUN STATE, NIGERIA.

TITLE OF EXAMINATION: B.SC DEGREE EXAMINATION

COLLEGE: SCIENCE AND TECHNOLOGY

DEPARTMENT: COMPUTER AND INFORMATION SCIENCES SESSION: 2018/2019

SEMESTER: ALPHA

COURSE CODE: CSC310

CREDIT UNIT: 2

COURSE TITLE: INTERNET PROGRAMMING

INSTRUCTION: Answer Any Three (3) Questions

TIME: 2 HOURS

- (1) (a) (i) Explain the three architectures that can be used to categorize a typical distributed system. (3 Marks)
- (ii) Discuss the issues usually associated with distributed system. (2.5 Marks)
- (iii) IP addresses provide the means for device and object identification in a network. Present in a tabular form, the five classes of IP addresses depicting their class names, first Octets, Net-IDs, Default subnet masks and their availability. (2.5 Marks)
- (iv) As a web application developer, you are confronted with a task of developing an interactive website for a customer, describe the step-by-step procedures involved to put this website on the internet. (3 Marks)
- (b) As one of the many tasks involved in a website design, write HTML codes to achieve the following tasks:
- (i) Embed an internal style sheet to set the body background image to images/backblue.gif. (2 Marks)
- (ii) Display an image (myphoto.gif) of size width: 200, height: 180 and when clicked will link to the following website (<http://www.myphotosite.com>). (2 Marks)



(iii) Display table 1 below in a browser:

(2.5 Marks)

S/n	Name of Fruits	Price
1	Apple	N200.00
2	Orange	N50.00
3	Banana	N100.00
4	Pawpaw	N150.00

Table 1

(iv) Create the form as represented in figure 1 below:

(6 Marks)

The screenshot shows a web browser window with the title 'Internet and WWW How to Program: Forms - M...'. The address bar shows 'D:\Lecture\Internet\Publishing\CourseMaterial\'. The main content area displays a 'Feedback Form' with the following elements:

- Feedback Form**
- Please fill out this form to help us improve our site.
- Name:
- Comments:
- E-mail Address:
- Things you liked:**
  - Site design ☐ Links ☐ Ease of use ☐ Images ☐ Source code ☐
- How did you get to our site?:**
  - Search engine ☒ Links from another site ☐ Deitel.com
  - Web site ☐ Reference in a book ☐ Other ☐
- Rate our site:  (Dropdown menu showing 10, 9, 8, 7, 6, 5, 4, 3, 2, 1)
- Submit  Clear Your Entries

The browser status bar at the bottom shows 'Done', 'Awful', and 'My Computer'.

Figure 1

(2) (a) What is Cascading Style Sheet (CSS) and write down the differences between HTML and CSS.

(3 Marks)



- (b) List the five parts of CSS syntax and write a CSS rule with element id="wrapper" to achieve the following: set text-align to center, set border to 1 pixel and solid red, width= 200 pixels and height =100 pixels. (7 Marks)
- (c) What is CSS Box Model? Illustrate this model using appropriate diagram. (4 Marks)
- (d) Discuss the benefits of using CSS to a website site designer/developer. (3 Marks)
- (e) Write JavaScript program to accept three integer values from the user and output the maximum on the browser screen. (6 Marks)
- (3) (a) In developing a database driven application in PHP & MySQL, there are three popular ways to connect to MySQL server or any other databases, discuss these popular ways and recommend which is the best and why? (6.5 Marks)
- (b) Write PHP program to establish connection to MySQL DBMS using the following methods:
- // PDO
  - // MySQLi, Procedural method
  - // MySQLi, Object oriented method
- (6.5 Marks)
- (c) Illustrate with sample PHP program, the difference between the use of a numeric array and associative array. (9 Marks).
- (4) (a) In a student information system portal, we have 'StudDB' as database and one of the tables is 'marks'. This table has been populated with the following tuples as shown in table 2:

StudentID	FirstName	LastName	Mark
1	Fred	Jones	78
2	Bill	James	67
3	Carol	Smith	82
4	Bob	Dunca	60
5	Joan	Davis	86

Table 2

What will be the output when the following SQL commands are issued? (10 Marks)

- (i) Select \* from marks where StudentID > 1 And StudentID < 5;
- (ii) Delete from marks where marks >= 80;
- (iii) Select \* from marks order by mark DESC



- (iv) Select count(\*) from marks;
- (v) Update marks set mark = '60';

(b) Write a PHP program to compute the average age of the following 10 students {16, 21, 18, 20, 19, 22, 18, 17, 18, 16} using a numeric array and display the average age on the browser. **(13.5 Marks)**

(5) (a) Discuss 5 reasons why PHP and MySQL are better chosen as a development platform of choice. **(6.5 Marks)**

(b) Discuss the benefits of Content Management System (CMS) and give 5 Examples. **(6.5 Marks)**

(c) A database table exists in MySQL called "company-cars" write a PHP program to retrieve all the record into a numeric array and display them on the browser using HTML table. **(10.5 Marks)**