MOSHOOD ABIOLA POLYTECHNIC, ABEOKUTA
DEPARTMENT OF COMPUTER SCIENCE
FIRST SEMESTER EXAMINATION 2023/2024 SESSION

COURSE TITLE: SOFTWARE DEVELOPMENT USING PHP
COURSE CODE: COM 411   UNITS: 3   TIME ALLOTTED: 3 HOURS
CLASS: HND I I COMPUTER SCIENCE (FULL /PART TIME)

INSTRUCTIONS: SECTION A: Answer any four (4) questions in All: SECTION B: Attempt any ONE (1) question

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QUESTION 1

(a) With the aid of well-labelled diagram, describe Entity-Relationship Model and its Features with examples

(b) Write briefly on TCP, HTTP,HTTPs,UDP,FTP and IP/TCP

(c) What is Web Application? And list any five (5) examples of web Apps

(d) List and explain any seven (7) OSI Layers Model

(20marks)

QUESTION 2

(a) Explain these: Web cache,cookies,POP3,DNS and IMAP with examples   (5marks)

(b) With the aid of well-labelled diagram, describe Webserver/Client technology (5marks)

(c) Discuss Hierarchical data model and with any five(5) features with examples (5marks)

(d) What are the Web based application development procedures   (5marks)

QUESTION 3

(a) Describe the meaning of Web server and to what extent in software development

(b) Write briefly on the following:

(i) URL/SSH

(ii) HTTP Response status code

(iii) TLD and Authoritative severs

(iv) P2P Architecture

(v) POP/IMAP/SMTP/IPV4/IPV6

(c) With the aid of well-labelled diagram, describe Software development Life cycle

(20marks)

QUESTION 4

(a) Explain the Reading/Writing in PHP with examples of related script files (5marks)

(b) What is an Array and Function in PHP with examples in a codes format   (5 marks)

(c) What do you understand by these, $_GET and $-_POST superglobal Array in PHP Scripts with examples. This must be done PHP codes   (10marks)

QUESTION 5

(a) With the aid of well-labelled diagram or table structured, explain the following terms: (i)Entity-Relationship model, (ii) Database management system(DBMS),(iii)OSI-model

(b)Discuss Structured Query language (SQL) and list any five (5) examples

(c)Write the SQL query to create a database and table for XYZ Business Enterprise "Employee" with five field names (Employee Id INTEGER PRIMARY KEY, First name CHAR () NULL, Last name

QUESTION 6

6a   Explain at least five steps or procedures necessary to convert your system to a localhost by installing XAMPP.   10 Marks

6b   As a developer using php for web development, can you interpret or explain each of the php code work in 1b to 1f:

```php
<?php

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "myDB";
```
2 Marks

6c
```php
//

$conn = new mysqli($servername, $username, $password, $dbname);

//

if ($conn->connect_error) {

  die("Connection failed: " . $conn->connect_error);

}
```
2 Marks

6d
```php
//

$sql = "SELECT FROM myTable";

$result = $conn->query($sql);
```
2 Marks

6e
```php
//

if ($result->num_rows > 0) {

  //

  while($row = $result->fetch_assoc()) {

    echo "ID: " . $row["id"] . " - Name: " . $row["name"] . " - Age: " . $row["age"] . "<br>";

  }

} else {

  echo "0 results";

}
```
2 Marks

6f
```php
//

$conn->close(); ?>
```
2 Marks

QUESTION 7

7a   Explain at least five usage and benefits of phpmyAdmin bundled with XAMPP.   10 marks

7b   Create a simple PHP script to display the current date and time.   2 Marks

7c   What is the syntax for declaring a variable in PHP?   2 Marks

7d   List and explain at least four (4) different data types supported by PHP?   2 Marks

7e   What is the purpose of the `$_POST` array in PHP?   2 Marks

7f   Explain using codes, how to connect to a MySQL database using PHP?   2 Marks