

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION **SEMESTER II SESSION 2022/2023**

COURSE NAME

: WEB DEVELOPMENT

COURSE CODE

: BIT 21503

PROGRAMME CODE : BIT

EXAMINATION DATE : JULY / AUGUST 2023

DURATION

: 3 HOURS

INSTRUCTIONS

: 1. ANSWER ALL QUESTIONS.

2. THIS FINAL EXAMINATION IS CONDUCTED VIA CLOSED BOOK.

3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY **EXTERNAL** RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK.

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

TERBUKA

CONFIDENTIAL

Q1 (a) Figure Q1 shows students' information to be sent for an HTML POST request.

Convert the information into JSON format.

```
Name: Mark Zuckerberg
Address: Kodiang, Kedah
Program: BIP
CGPA: 3.75
Scholarship: PTPTN

Name: Tim Cook
Address: Parit Raja, Johor
Program: BIT
CGPA: 3.95
Scholarship: Microsoft
```

Figure Q1

(15 marks)

- (b) Rewrite the following Javascript statements into jQuery statements.

 - (iii) var button = document.getElementById("myButton");
 button.addEventListener("click", function() {
 alert("I love web development");
 });
 (4 marks)
- Q2 (a) Determine the output of the PHP program shown in Figure Q2(a).

```
<?php
$rows = 3;
$cols = 10;

for ($i = 1; $i <= $rows; $i++) {
    for ($j = 1; $j <= $cols; $j++) {
        echo $i * $j . "\t";
    }
    echo "\n";
}</pre>
```

Figure Q2(a)

(15 marks)



(b) Figure Q2(b) shows an HTML file with its content. Write a PHP file that generates similar content.

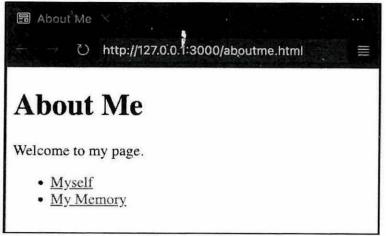


Figure Q2(b)

(17 marks)

Q3 Answer Q3(a) - Q3(d) based on the variables information shown in Table 1 and the database table information shown in Figure Q3.

Table 1: Variables information

| Variables | Value | |
|-----------|-----------|--|
| host | localhost | |
| username | admin | |
| password | Admin1234 | |
| dbname | WebDev | |

| users | |
|----------|--|
| username | |
| password | |

Figure Q3

(a) Write the variables declaration with their values in PHP.

(4 marks)

(b) Write PHP statements to create a database connection based on the variables declared in Q3(a).

(6 marks)

- (c) Write PHP statements to check if the database connection was successful.

 (6 marks)
- (d) Write PHP statements to execute a query to retrieve a username and password that match from a POST request.

(13 marks)

CONFIDENTIAL

BIT 21503

Q4 Describe any TWO (2) security threats that commonly happen nowadays. (a) (4 marks) (b) Define web development frameworks. (4 marks) (c) State THREE (3) advantages of using web development frameworks. (3 marks) Define WebAssembly. (d) (1 mark) List TWO (2) applications of WebAssembly. (e) (2 marks)

- END OF QUESTIONS -