



NESA NATIONAL EXAMINATION
AND SCHOOL INSPECTION
AUTHORITY

SOD -Web Application Development

T171

Monday, 31/07/2023

08:30 – 11:30 AM

TVET NATIONAL EXAMINATIONS, LEVEL 5, 2022-2023

QUESTIONS and ANSWERS BOOKLET

OPTION/ TRADE : SOFTWARE DEVELOPMENT

SUBJECT/EXAM: WEB APPLICATION DEVELOPMENT

DURATION: 3 Hours

Read carefully the instructions on page 1 & 2.

FOR EXAMINER'S USE ONLY



TVET NATIONAL EXAMINATIONS, LEVEL 5, 2022-2023

INSTRUCTIONS TO CANDIDATES (ANSWER BOOKLET)

1. A candidate should fill in the actual names and the Index number on the cover of this questions and answer booklet on the provided place.
2. It is illegal for a candidate to write any of names, Index number or school name inside the answer booklet.
3. No candidate should remove or tear any pages or part of it in the answer booklet.
4. A candidate should answer in the language in which the examination is set.
5. A candidate should sign on the sitting plan when submitting the answer booklet. He/she has also to check if the answer booklet is well sealed.
6. No extra paper is allowed in the examinations room. If a candidate is caught with it his/her results will be nullified.
7. No candidate is allowed to write answers not related to the subject being sat for, otherwise it will be considered as a cheating case.
8. Write your answers on the 16 lined pages (From page 7 to page 22).
9. Use the last non-lined pages as draft.
10. Results for any candidate who is caught in examination malpractices are nullified. The cheating can be recognized during examinations administration, marking exercise or even thereafter.

- N.B:**
- 1) After results publication, there is no remarking and no candidate is given his/her answer booklet for review. This answer booklet is a property of NESA.
 - 2) Claims are only received online within 30 days after results publication. A link will be provided after results publication.

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INSTRUCTIONS TO CANDIDATES (QUESTION PAPER)

This Exam paper is composed of Three Sections (A, B, and C). Follow the instructions given below, and answer the indicated questions for a total of 100 marks

Section A: Fourteen (14) questions, all **Compulsory** **55 marks**

Section B: Among the five (5) questions, attempt any three (3) **30 marks**

Section C: Among the two (2) questions, attempt any one (1) **15 marks**

Allowed materials:

- Blue or black pen
- Mathematical set

Note:

Every candidate is required to carefully comply with the provided assessment instructions.

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SECTION A: Attempt all questions

(55 marks)

01. Define the following terms: **(5marks)**

- a) PEAR
- b) PHP Compiler
- c) PHP Framework
- d) PHP Strings
- e) PHP Arrays

02. List four (4) examples of conditional statements used in PHP. **(4marks)**

03. Mention four (4) factors to be considered while selecting the best web server for hosting a website. **(4marks)**

04. Give the syntax of While and Do While used in PHP. **(4marks)**

05. What are five (5) examples of client-side programming languages? **(5marks)**

06. What is the output of the following HTML code? **(3marks)**

```
<!DOCTYPE html>
<html>
<head>
<title>Password Input Control</title>
</head>
<body>
<form >
    User ID: <input type = "text" name = "user_id" />
    <br>
    Password: <input type = "password" name = "password"
/>
</form>
</body>

</html>
```

07. Write five (5) rules for naming PHP variables. **(5marks)**

08. Give the flowchart of Switch... case used in PHP. **(4marks)**

09. What are the advantages of using operators in SQL? **(3marks)**

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- 10.** Read the following statements and answer by true(**T**) or false(**F**) at the **(5marks)** column of comment.

No	Statement	Comment
01	The BETWEEN operator selects values within a given range. The values can be numbers, text, or dates.	
02	The LIKE operator is used in a GROUP BY clause to search for a specified pattern in a column.	
03	(%) The percent sign represents zero, one, or multiple characters	
04	(_) The underscore represents a single character	
05	The AND operator displays a record if any of the conditions separated by AND is TRUE.	

- 11.** Analyze the PHP script below and give the output. **(5marks)**

```
<?php  
$radius = 4;  
$diameter = $radius * 2;  
$circumference = M_PI * $diameter;  
$area = M_PI * pow( $radius, 2 );  
echo "This circle has...<br />";  
echo "A radius of " . $radius . "<br />";  
echo "A diameter of " . $diameter . "<br />";  
echo "A circumference of " . $circumference . "<br />";  
echo "An area of " . $area . "<br />"; ?>
```

- 12.** Suppose you have a local server with host name: localhost, server name: root, server password:123b and a database: myDB. Use mysqli_connect() function to connect to the above server. **(2marks)**

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- 13.** Use the cookie created below to write a PHP script that will retrieve the **(3marks)** cookie name and value for the cookie.

```
<?php  
$cookie_name = "admin";  
$cookie_value = "ABC";  
setcookie($cookie_name, $cookie_value, time() + (56435 * 28),  
"/");  
?>
```

- 14.** Write HTML form codes used to produce the following URL information. **(3marks)**

http://localhost/exam2023/insertclass.php?classname=L5SOD&Save=Save

Section B: Attempt any three (3) questions

(30 marks)

- 15.** Distinguish between strsub() and strpos() functions. **(10marks)**
- 16.** Develop the HTML codes according to the output given in table **(10marks)** below:

Contact Us

Message

Submit

- 17.** Differentiate GET method from POST method. **(10marks)**

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- 18.** The process of moving a developed web from local Computer to a public host (Server) is known as Deployment.
- a) Give and explain two (2) types of protocols to be used in deployment process. **(5marks)**
- b) Determine any five (5) application requirements. **(5marks)**
- 19.** During web deployment process;
- a) What is the difference between Virtual machine and Hyper-visor tool? **(3marks)**
- b) What are three (3) types of zones in windows DNS server? **(3marks)**
- c) What is the information required on Network card when TCP/IP is configured on Window Server? **(4marks)**

Section C: Attempt only one (1) question (15 marks)

- 20.** Write a PHP program that opens and displays the contents of file called welcome.txt. **(15marks)**
- 21.** Write a PHP program to print related day name according to the entered number (1,2,3,4,5,6,7) by using switch case statements. **(15marks)**

END OF ASSESSMENT

**Do not
write in
this margin**

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