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ICT TECHNICIAN LEVEL 6

WEBSITE DESIGN

IT/CU/ICT/CR/5/6

WRITTEN ASSESSMENT THREE

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. *Write your registration/ admission number on the answer booklet. Answer questions in the answer booklet provided.*
2. *Mobile phones and unauthorized electronic gadgets are **NOT** allowed in the examination room*
3. *Any exam malpractice will lead to disciplinary action*
4. *Do not write on the question paper*
5. *Use a blue colored pen for writing*
6. *Candidates should answer the questions in **English** unless stated otherwise*
7. *Hand in **BOTH** the question paper and answer sheet at the end of the exam*
8. *Marks for each question are indicated in the brackets*

Total Marks: 60

SECTION A (20 MARKS)

Answer ALL Questions in this section.

1. Define the following terms as used in Web Design and Development.
 - a) JavaScript Function (2 Marks)
 - b) PHP Variable (2 Marks)
 - c) Domain Name (2 Marks)
 - d) Website Hosting (2 Marks)
 2. State **FOUR** advantages of using PHP in web application development. (4 Marks)
 3. Outline **FOUR** JavaScript data types. (4 Marks)
 4. State **FOUR** factors to consider when selecting a web hosting service. (4 Marks)
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SECTION B (40 MARKS)

Answer ANY TWO Questions in this section. Each question carries 20 Marks.

Question 1 (20 Marks)

- a) JavaScript provides several built-in features that make web pages interactive.

Discuss the following JavaScript concepts and give a suitable example for each.

- i. JavaScript Functions (4 Marks)
 - ii. JavaScript Objects (4 Marks)
 - iii. JavaScript Events (4 Marks)
 - iv. JavaScript Arrays (4 Marks)
- b) Differentiate between the following JavaScript data types.
- i. Strings and Numbers (2 Marks)
 - ii. Arrays and Objects (2 Marks)

Question 2 (20 Marks)

- a) PHP is a widely used server-side scripting language for developing dynamic websites.

Discuss the following PHP concepts and provide an example of each.

- i. PHP Syntax (3 Marks)
- ii. PHP Variables (3 Marks)

iii. PHP Data Types **(3 Marks)**

iv. PHP Operators **(3 Marks)**

b) Explain the purpose of the following PHP features.

i. Control Structures **(4 Marks)**

ii. Functions **(2 Marks)**

iii. Arrays **(2 Marks)**

Question 3 (20 Marks)

a) Dynamic websites often interact with databases and user input. Discuss the following concepts.

i. Database Creation **(4 Marks)**

ii. Database Linkage (Connecting PHP to a Database) **(4 Marks)**

iii. PHP Forms **(4 Marks)**

b) Website deployment is an important stage in web development. Discuss the following.

i. Website Hosting Process **(4 Marks)**

ii. Uploading a Website to a Web Server **(4 Marks)**

Question 4 (20 Marks)

a) Website maintenance ensures that a website remains secure, functional, and up-to-date. Discuss the following website maintenance activities.

i. Importance of Website Testing **(4 Marks)**

ii. Creation, Updating and Archiving of Website Content **(4 Marks)**

iii. Generating a Website Maintenance Report according to Internal Policy **(4 Marks)**

b) Discuss the following website security and legal considerations.

i. Security Measures for Websites **(4 Marks)**

ii. Legal and Regulatory Requirements in Website Development and Hosting **(4 Marks)**

