Graphic Era
HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

End Term (Even) Semester Examination May-June 2025

Roll no

Name of the Program and semester: Diploma VI
Name of the Course: Advance Web   Technology
Course Code: DTCS-602

Maximum Marks: 100

Time: 3 hour

Note:
- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

(2X10=20 Marks)

Q1.
a) Explain the concept of "Home Page" in a website. How does it differ from a "Web Page"? What role does it play in website navigation?CO2
b) Define the World Wide Web (WWW). How does it differ from the Internet? Provide examples of how both are used in day-to-day life.CO1
c) Explain the role of the following protocols in network communication:
- Simple Mail Transfer Protocol (SMTP)
- Telnet
- Hypertext Transfer Protocol (HTTP)CO1

(2X10=20 Marks)

Q2.
a) Explain the structure of an HTML document. Discuss the role of essential tags such as <html>, <head>, <body>, and their attributes.CO2
b) Create a simple HTML page containing text, images, a table, and a hyperlink. Discuss the usage of <div>, <img>, and <table> tags with examples.CO3
c) What is the difference between HTML 4 and HTML 5? Discuss the new features introduced in HTML 5.CO1

(2X10=20 Marks)

Q3.
a) What are objects and methods in JavaScript? Provide examples of creating and manipulating objects in JavaScript.CO2
b) Explain the concept of DHTML. How does JavaScript help in creating dynamic HTML pages? Provide an example where JavaScript is used to change text content dynamically.CO3
c) What are the different data types in JavaScript? How does type casting work in JavaScript? Provide examples.CO4

(2X10=20 Marks)

Q4.
a) Explain the structure and components of an XML document. Discuss the role of DTD and Schemas in XML with examples.CO2
b) Create a simple XML document and a JSON object to represent a student s information (name, roll number, and course). Discuss the advantages of JSON over XML.CO2
c) What are DTD and XML Schema? How do they help in defining the structure of XML documents? Provide an example of each.CO4

(2X10=20 Marks)

Q5.
a) What are variables and data types in PHP? Explain how to define variables and use type casting in

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PHP.CO2
b) Explain the concept of "Cookies" in PHP. How are they set, retrieved, and deleted in PHP? Provide an example of a PHP script that sets a cookie and displays its value.CO3

c) Discuss arrays in PHP. Provide examples of indexed arrays, associative arrays, and multidimensional arrays.CO2