

Exam	Final Examination 2078		
Level	B.E.	F M	100
Programme	Computer	PM	45
Year/Part	III/I	Time	3 hrs

Subject: Advanced Web Technology (Sample)

Candidates are required to give answers in their own words as far as practicable.

The figure in the margin indicates full marks.

Attempt all the questions

1. a) What is an IP Address? Explain DNS Resolution and use of IP Address in DNS. 7
b) Describe three-tier architecture. How domain name registration is carried out and why is web hosting required? Explain briefly 8
2. a) Describe the origin and evolution of HTML. How does XHTML differ from HTML? 8
b) What is a HTML image maps? Why is image map used? Explain with an example. 7
3. a) What are different levels of style sheets? Explain their usages and how each level differ from other? 8
b) Why JavaScript is called Client Side Scripting Language? How do you create and modify objects in JavaScript? 7
4. a) How are form validated in JavaScript? Write a program to validate a form using JavaScript. The form should include email, full name, phone, username. The validation criteria are: 8
 - i. Email: Required, should be only from pu.edu.np domain.
 - ii. Full name: Required
 - iii. Phone: Required, should be only 8 digit long.
 - iv. Username: Required, should be alphanumeric and only have full stop (.) and underscore (_)
- b) What is the use of array in JavaScript? Create an array with string values. Perform the following steps on an array: 7
 - i. Add a value into the end of an array.
 - ii. Remove the first element of an array.
 - iii. Remove the last element of an array.
 - iv. Add a new value to starting of an array.
 - v. Create a string value from the array.
5. a) What is the main use of PHP in web programming? Why PHP called Server Side Scripting Language? 8
b) Why and how do we connect PHP with MySQL? Write a PHP code that performs operations below: 10
 - i) To connect and create a database named "library".
 - ii) The database should also have table named "books".
 - iii) The table should also have 5 properties (columns).
6. a) Explain the use of pattern matching in PHP with a suitable example.
b) Why are session used in PHP? Explain the implementation of session with a suitable example.
7. Write short notes on: (Any two) 2 X 5 = 10
 - a) Bootstrap Framework
 - b) File Handling in PHP
 - c) URL