

POKHARA UNIVERSITY

Level: Bachelor
Program: B.E. Computer

Semester : Spring-VI

Course: Advanced Web Technology (Elective I)

Year : 2025

F.M : 100

P.M. : 45

Time : 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt all the questions.

- 1 a) Define client/server programming. Differentiate client/server programming with code example. (8)
b) Define semantic HTML. Also write down code to insert image, audio and video to web page. (7)
- 2 a) What do you mean by form validation. Explain with code example to validate a form in client side and server side. (8)
b) Define Routes, Views and Templates with code example. (7)
- 3 a) Define Box Model. Explain Flexbox and Grid layout with code example. (7)
b) Define DOM. Write down the code to show an example of functions and loops in JavaScript. (8)
- 4 a) What do you mean by python data structure? Explain List, Tuple, Set and Dictionaries with code example. (8)
b) Define OOPs. Explain different types of inheritance supported in python with code example. (7)
- 5 a) What is CSV and JSON? Write down the code to save information to a file and readback to the console in python file handling. (8)
b) What do you mean by deployment platform? Differentiate between development and deployment environment with code example. (7)
- 6 a) Design a login page and validate username and password from database. If user name and password match set session and redirect to dashboard page otherwise show invalid username and password flash message on the screen. (7)
b) Define web service. Write down the API CRUD functionalities for any SQLAlchemy class using flask. (8)

7. Write down short notes (on any two) $5 \times 2 = 10$

a) Common Form Elements

b) Sending Email

c) Authentication and Authorization

<<Good Luck>>