Tribhuwan University Institute of Science and Technology 2075

Bachelor Level / fifth-semester / Science Full marks: 60 **Computer Science and Information Technology(CSC318)** Pass marks: 24 (Web Technology) Time: 3 hours Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Attempt any Two questions: (2x10=20)

- 1. Explain the architectural issues of the web layer with examples.
- 2. Explain the use of XML in web development. Write internal and external DTD to describe "mail" as a root element and "to", "from", and "subject", and "message" as child elements.
- 3. Develop a simple Web site that takes first name, last name and address from the user and stores this information in the database. Use JavaScript to validate form data.

Group B

Attempt any Eight questions: (8x5=40)

- 4. What is the structure of an HTML file? Explain with examples.
- 5. Define CSS? How can you use an external CSS? Explain.
- 6. How can you define an event handler? Write a Javascript to demonstrate event handling. 7. Compare XML schema with DTD.
- 8. Discuss the use of Cookies with suitable examples.
- 9. Why do we need XSLT? Explain XSL <xls:for-each> Element.
- 10. What is Web server software? Discuss its role on the Internet.
- 11. Write server-side code to select data stored in the database.
- 12. Discuss integrated window authentication.
- 13. Write short notes on:
 - a) SMTP
 - b) XQuery