



## University of Vavuniya

First Examination in Information and Communication Technology - 2020

First Semester - August 2022

**TICT1142 - Fundamentals of Web Technologies (Theory)**

**Answer Two Questions Only**

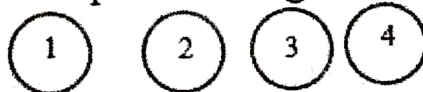
**Time Allowed: One hour**

---

1. (a) State the use of domain name in **World Wide Web**. [10%]

(b) Consider the domain name given below: [10%]

**developer.mozilla.gov.us**



i. Identify the numbered components (1 to 4) of the given domain name. [10%]

ii. Briefly describe about the component 1 and component 4 of a given domain name. [20%]

(c) Explain the importance of Domain Name Server (DNS) for the successful delivery of a message in the Internet. [20%]

(d) Clearly explain the steps involved in DNS request. [20%]

(e) Discuss the importance of a hosting server to host files in the web. [20%]

2. (a) Briefly describe each of the following disciplines in the context of web designing.
- i. Interaction Design
  - ii. User Interface Design
  - iii. User Experience Design [15%]
- (b) Describe what is meant by site performance in web designing and suggest ways to improve the site performance of a website. [25%]
- (c) Briefly describe the broad categories of the disabilities for web accessibility and provide two measures taken by the W3C to ensure content is accessible for each. [30%]
- (d) Elaborate the uses of each of the following design documents.
- i. User research and testing report
  - ii. Wireframe diagrams
  - iii. Site diagrams [30%]

3. (a) Consider the navigation bar shown below and answer the following questions.

- i. Write a HTML segment to create the above navigation. [10%]

Home
About
News
Contact Us

- ii. Write the CSS rules for the following styles by choosing **suitable selectors**.

A. Remove bullets, margin and padding. [10%]

B. Set width of the navigation bar to 200px, and background color #f1f1f1. [15%]

*[This Question continues on next page.]*

- C. Make the whole area of the link clickable, font color #000, padding top and bottom 8px, left and right 10px. [15%]
- D. Change the link color to white and background color to #555 on mouse hover. [15%]
- E. Set the background color as #4CAF50 and foreground color as white when the link is active. Write the HTML written in part (i) with required modifications for the change. [15%]
- F. Make notifications in CSS rules to the suitable selector to make the full height, fixed navigation bar with the scrolling enabled if the side navigation bar has more content. [20%]