



Date: 12.06.2007

Time: 10.00 a.m – 12.00 noon

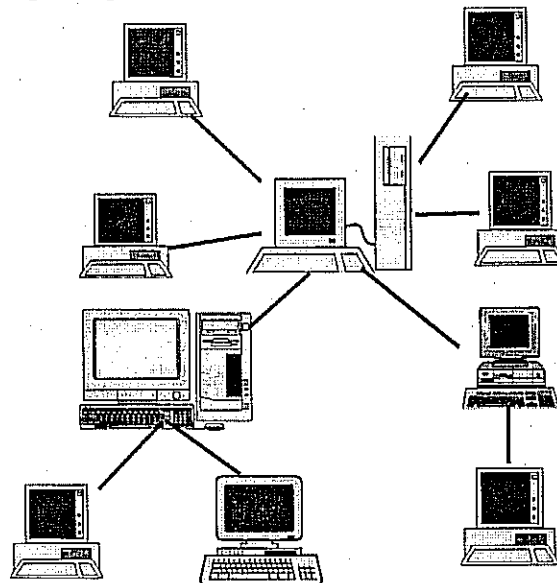
**Answer Four Questions Only**

**Q1.**

- a. What is meant by *Data Transfer Speed* and what are the factors that can influence it? Explain briefly.
- b. What are the differences between WAN and MAN?
- c. Compare and contrast *Coaxial* and *Satellite links* communication medias.
- d. What are the concepts of *direction of transmission*? Describe briefly using one example for each.

**Q2**

- a. List the layers of the *Operational Layer* of network technology. Discuss the operations of these layers.
- b. State the four network topologies and describe two of them.
- c. Identify the network topologies in the following network and sketch those topologies separately.



- d. Write short notes on the followings.
  - i. Bandwidth of a transmission
  - ii. Serial and Parallel transmission

Q3.

- a. Describing its special features, explain what The Internet is.
- b. Distinguish between *File Transfer Protocol (FTP)* and *Telnet*.
- c. "The ring network topology is relatively inefficient" Do you agree with this statement? Explain briefly.
- d. A simple URL is given bellow:  
`http://www.ou.ac.lk/student/results.html`

Identify the following components of this URL.

- i. Protocol
- ii. Server
- iii. Directory
- iv. File

Q4.

- a. State whether the following statements are true or false. Justify your answer.
  - i. ISP establishes the link between national telecommunication network and international telecommunication network.
  - ii. Domain Name Server (DNS) performs the conversion between domain names and the actual IP address.
  - iii. Resource sharing and Security are the two major advantages of having networks.
  - iv. The *Mirror site* is a sever, keeping commonly used information.
  - v. A Bridge can deal with the different protocols at the two sides of the networks.
  - vi. In the *Hierarchical network topology* the top computer must be a powerful computer.

- b. Give three reasons why computer network composing and decomposing are required. Explain each one briefly.

Q5.

- a. Write short notes on the following:
- i. WWW
  - ii. ISP
  - iii. Switches
- b. State whether the following statements are true or false.
- i. Routers are intelligent devices which work similar to hubs but do not transfer the traffic.
  - ii. Email messages are passed through various mail servers until the message reaches its final destination.
  - iii. Uniform Resource Locators is used to denote an address of a server on The Internet.
  - iv. The speed of communication or the data transfer speed is technically defined as a *Mode of transmission*.
  - v. Email technology has been improved to send and receive complicated file formats such as graphics and sound.
- c. Discuss how a person or an organization can get connected to the Internet.

Q6.

- a. Write HTML codes to do the following tasks.
- i. Linking to an outside URL "<https://login.yahoo.com/config/mail>"
  - ii. Linking the Image "*Home.gif*"
  - iii. Set the following statement as a paragraph which is written in font size 10.  
"Computer is a machine. Nevertheless, it is a special kind of machine as it can be instructed to work as many other machines."

b. Write HTML codes create the following page.

## MY EDUCATION

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- Secondary Education Qualifications

- i. G.C.E O/L
- ii. G.C.E A/L

G.C.E O/L	8 Distinction
G.C.E A/L	<ul style="list-style-type: none"><li>• Pure Mathematics C</li><li>• Applied Mathematics C</li><li>• Chemistry A</li><li>• Physics B</li></ul>

- Higher Education

B.Sc.	The Open University of Sri Lanka.
MA	The Open University of Sri Lanka.

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