

015

SOUTH EASTERN UNIVERSITY OF SRI LANKA

**FINAL EXAMINATION IN BACHELOR OF BUSINESS ADMINISTRATION AND
COMMERCE 2009/2010
SEMESTER-1, AUGUST-2011**

MIS 4110 INFORMATION AND COMMUNICATION NETWORK

Answer all questions

Time: 3 Hours

Q1.

- i. Explain the various guided and unguided media with its data transmission features. (05 Marks)
- ii. Explain the different transmission impairments and their effect. (04 Marks)
- iii. Describe the various types of digital-to-analog modulation methods. (05 Marks)
- iv. Explain the layers in OSI Model, the data unit in each layer, and the functions of each layer. (06 Marks)

(Total Marks 20)

Q2.

- i. Differentiate mail server and proxy server and explain the reasons of using proxy server in networking. (04 Marks)
- ii. Discuss the data frame's components and illustrate how these components are involving in data communication. (06 Marks)
- iii. Explain various types of error detection methods with suitable example. (05 Marks)
- iv. Differentiate logical, physical address, and port address. Give some examples of well-known ports. (05 Marks)

(Total Marks 20)

Q3.

Answer the following questions by using the IP address: **150.05.50.05/30**

- i. Find network address and host address bits of this mask. (03 Marks)
- ii. Find start and ending host IP addresses of this sub network. (03 Marks)
- iii. Calculate maximum number of hosts and possible sub networks. (03 Marks)
- iv. Find network address of this IP address and Broadcast address of this sub network. (04 Marks)
- v. Write the IP table including sub network address, valid host range and broadcast address for first 8 sub networks. (07 Marks)

(Total Marks 20)

Q4.

- i. Explain Network Address Translation (NAT) and its usage in the safer network environment. (04 Marks)
- ii. Explain how web server is different from database server. (03 Marks)
- iii. What do you mean by Social Engineering and explain the mostly used techniques in it. (04 Marks)
- iv. Assume that you are a Network Administrator. Explain what security measures that you would take to prevent unauthorized network access. (04 Marks)
- v. Explain some of the new roles of Windows Server 2008 and write the steps to create **MISSTUDENTS** group and to add a student as a member of this group in the Active Directory Domain Services. (05 Marks)

(Total Marks 20)

Q5.

Explain the following terms.

- i. Intrusion Detection Systems (IDS) and Secure Sockets Layer (SSL)? (04 Marks)
- ii. Broadcast domain and collision domain. (04 Marks)
- iii. POP3, VTP, and HTTPS (04 Marks)
- iv. Baseband, Broadband, and Guard band. (04 Marks)
- v. Amplitude Modulation (AM) and Phase Modulation (PM) (04 Marks)

(Total Marks 20)