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[*Knowledge for Development*]

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2015/2016 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER TWO EXAMINATIONS**

**FOR THE MASTER OF SCIENCE IN
INFORMATION TECHNOLOGY**

COURSE CODE : MIT825

COURSE TITLE : NETWORK MANAGEMENT

DATE: 13/05/2016

TIME:200PM-400PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO

SECTION A (Compulsory – 20 Marks)

QUESTION ONE

- a) Distinguish between a wired LAN and a wireless LAN (4 Marks)
- b) Explain each of the following internet terminologies
- (i) Bookmark (2 Marks)
 - (ii) Daemon (2 Marks)
 - (iii) Download (2 Marks)
- c) (i) Throughput is the actual, measured, bandwidth, at a specific time of day, using specific internet routes, while downloading a specific file. The throughput is often far less than the maximum bandwidth
- Discuss five factors that determine throughput (5 Marks)
- (ii) Explain the Requirements for Data Communication (5 Marks)

SECTION B (Attempt any TWO Questions from this section – 40 Marks)

QUESTION TWO

- a) Internet, the network of networks, has changed the landscape of almost every sphere of society, from technology to life style, from business to politics, it is everywhere but given all these advantages, it has also resulted in more complex and more heterogeneous network. Simple Network Management Protocol (SNMP) is a popular management scheme to manage Internet.
- Discuss the SNMP Architecture (10 Marks)
- b) Discuss a wireless LAN. (10 Marks)

QUESTION THREE

- (a) Explain how IP Routing is accomplished. (10 Marks)
- (b) With today's communication software and hardware, there is a tremendous amount of Management capability built into each device. In addition, you can install protocols for the express purpose of more management. As an example, an organization may decide to run the Simple Network Management Protocol or Cisco Discovery Protocol in order to solicit information and control network devices. While it is clear the some level of administration is vital, it is easy to get carried away and spend the day "supervising" devices that are working just fine.

There are literally dozens of management “items.”

Identify ten such items; information that can be reported from most networking devices

(10 Marks)

QUESTION FOUR

- (a) The RF communication equipment commonly used include portable radios, mobile radios, base/fixed station radios, repeaters, and base station/repeaters.

Explain portable radios and Base/Fixed Station Radios.

(10 Marks)

QUESTION FIVE

- a) Bits flowing across the Ethernet are grouped into structures called frames. A frame must be between 46 and 1500 bytes in size. An Ethernet frame has four parts..

Explain these parts.

(8 Marks)

- b) Voice quality is affected by latency, jitter, and packet loss. Discuss these three parameters.

(12 Marks)