



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
SCIENCE HEALTH RECORDS AND INFORMATION MANAGEMENT
PHI 210:COMPUTER APPLICATION FOR HEALTH MANAGEMENT

DATE: Tuesday, 16th May 2017

TIME: 2.00p.m-4.00p.m

INSTRUCTIONS

SECTION A IS COMPULSORY ATTEMPT TWO QUESTIONS IN SECTION B

SECTION A

Question One

a. Study the following two adverts and answer the questions that follow:

	Computer A	Computer B
		
	All-in-one desktop	Ultrabook
Line		
1	Intel Core i7-4770K 3.5 GHz processor	Intel Core i5-3317U 1.7 GHz processor
2	16 GB of DDR3-1866 RAM	4 GB RAM
3	27 inch 10 pr touch LCD widescreen	13.3 inch touch screen
4	3 GB GeForce GTX 780 graphics card	Intel 1 GB HD Graphics 4000 card
5	1 TB hard drive	500 GB hard drive
6	Blu-Ray disc	Dual-Layer DVD+/-RW
7	4 USB 3.0 ports	3 USB 2.0 ports
8	1.3 Megapixel webcam	Integrated webcam
9	802.11ac dual-band Wi-Fi	Wi-Fi, Bluetooth enabled
10	Windows 8	Windows 7
11		1.3 kg
12		6 hour battery life
13	Wireless keyboard and mouse	
14	Gaming and everything else	General Purpose use

- a. 1. Name the processor speed of the computer with the highest speed (1mark)
- a. 2. Name the size of computer A's primary or main memory (1mark)
- a. 3. Name the storage capacity of the computer with the largest storage capacity (1 marks)
- a. 4. Besides the size, name another specification regarding computer screens that are also regarded as important. (1mark)
- a. 5. State what USB ports are used for (1mark)
- a. 6. The weight for Computer B is indicated as 1.3 kg. State why there is no weight given for Computer A? (1mark)
- b. State the ranges of private IP addresses in IPVA? (3marks)
- c. The IP protocol and most LAN and WAN protocols are classified as "unreliable". Briefly explain what this "unreliable" description refers to (2marks)
- d. Discuss the optical fiber as a bounded transmission media of data (6marks)
- e. Explain the difference between baseband and broadband network (4marks)
- f. Briefly describe the factors influencing the need to adopt IP v6 and replace IPv4. (6marks)
- g. Briefly explain the difference between a port address, a logical address and a physical address. (3marks)

SECTION B (ATTEMPT ANY TWO QUESTIONS)

Question Two

(20marks)

- a) Discuss satellite as unbounded media for data transmission (6marks)
- b) Discuss the functions of transport layer (2marks)
- c) Define bus network and discuss its advantages and disadvantages (6marks)
- d) Briefly describe the factors influencing the need to adopt IP v6 and replace IPv4 (6marks)

Question Three**(20marks)**

- a. There are five classes of IP addresses in IPV4. Name them and their ranges(5marks)
- b. Consider the following IPV6 classification and explain what they mean (4marks)
 - (i) Global Address
 - (ii) Link-local Address
 - (iii) Unique Local address
- c. Discuss some reasons why you want to monitor your network (3marks)
- d. Explain the following wireless networking standards (8marks)
 - (i) 802.11a
 - (ii) 802.11b
 - (iii) 802.11g
 - (iv) 802.11n

Question Four**(20marks)**

- a. State four characteristics of STP cable (4marks)
- b. Discuss the differences between Star, Ring and Bus topology (16marks)

Question Five**(20marks)**

- a. Using examples, explain the following classification of Networks (12marks)
 - (i) LAN
 - (ii) MAN
 - (iii) WAN
 - (iv) CAN
- b. Discuss the following Network Devices (8marks)
 - (i) Repeater
 - (ii) Bridge
 - (iii) Switch
 - (iv) Router
 - (v) Firewall
 - (vi) Proxy server
 - (vii) Wireless Access point
 - (viii) DNS