UNIVERSITY EXAMINATION 2017/2018
YEAR I SEMESTER II EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
BIT 2120: INSTALLATION AND CUSTOMIZATION

INSTRUCTIONS

*Answer Question one and any other **two** questions*

Question One: [30 marks] – Compulsory

a) Describe how computer systems make use of virtual memory. [2 marks]

b) Explain three functions of an operating system [6 marks]

c) Describe the purpose of the following utilities in a system

      i. DMA

      ii. IRQ

      iii. BIOS [6 marks]

d) Files in the directory structure adhere to a Windows naming convention. List four
Windows naming convention [4 marks]

e) Describe the two main differences between an AT and ATX power supply unit
[4 marks]

f) Explain two alternative procedures of draining off the CMOS configurations
[2 marks]

g)   [i] define the term disk cloning [2 marks]

    [ii] Explain four purposes of disk cloning [4 marks]

Question Two [20 marks]

a) Discuss three reasons why a technician MUST know and understand the particular
BIOS system running machines under his jurisdictions [6 marks]

b) "POST is said to be the first line of defense for any trouble shooting technician"
Qualify this statement. [4 marks]

c) Describe any five tools common for any technician [5 marks]

d) Describe any FIVE safety precautions that needs to be observed in a maintenance

Workshop [5 marks]

Question Three [20 marks]

a) Describe the purpose of "power good" signal within the context of system booting

[1mark]

b) Describe the significance of the following system files

      i. config .sys

      ii. Autoexec.Bat

      iii. Command .com

      iv. IO.SYS

      v. MSDOS.SYS   [5 marks]

c) State four symptoms that indicate the presence of a virus in a computer system [4 marks]

d) Briefly explain the following power management features of windows

      i. Standby mode [2marks]

      ii. Hibernation [2 marks]

e) Various types of software are used to protect hardware and data. Explain three

Protection software tools [6 marks]

Question Four [20 marks]

a) To help shield against power fluctuation issues, protection devices are used to

Protect the data and computer equipment. Identify two protection devices and their

Function. [4 marks]

b) Explain three circumstances where clean Installation of an Operating system may be

Required [6 marks]

c) Highlight four factors that should be considered when replacing a CPU

[4marks]

d) List four types of expansion bus slots found in motherboard [2marks]

e) After John installed Windows operating system in a computer he had assembled, he

Found out from the device manager that one device is marked by a yellow

Exclamation mark and another device with a red "X". Interpret the meaning of the

Two warning signs for John. [4marks]

Question Five [20 marks]

a) Describe any **six** general safety guidelines observed to prevent damage to self and Computer equipment during hardware installation [6marks]

b) Differentiate between the terms **formatting** and **partitioning** with relation to hard Drive. [4marks]

c) Describe any five indicators that a system is experiencing hardware conflict [5marks]

d) Explain any five prime items you would consider putting on a motherboard Purchase checklist in their order of priority [5marks]