



TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

DICT/JAN/2019

ECS 2105: COMPUTER SUPPORT AND MAINTENANCE

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2019

TIME: 2 HOURS

DATE: Pick Date Aug 2019

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE (30 marks)

a) Explain the following terms:

- i. Disk Cloning
- ii. POST
- iii. CMOS Chip
- iv. System Bus
- v. PCIe

(10 marks)

b) Explain **five** steps on how to install a new NIC

(5 marks)

c) Identify the following power connectors and their functions.

(8 marks)



d) Explain **two** differences between SSD and HDD.

(4 marks)

e) State **three** factors to be considered when upgrading a new RAM

(3 marks)

Question TWO (15 marks)

a) BIOS setup programs differ between manufacturers, they all provide access to menu items. Explain **five** menu items of the BIOS Setup program. (10 marks)

b) Explain the procedures on how to mount a disk volume in Window 8.x and above. (5 marks)

Question THREE (15 marks)

a) Understanding the boot process in Windows can help a technician troubleshoot boot problems. Briefly explain windows booting process. (10 marks)

b) Explain **five** roles and responsibilities of IT professional. (5 marks)

Question FOUR (15 marks)

a) Discuss the following system maintenance. (10 marks)

(i) System Backup and restore

(ii) System hardware diagnostic tools

(iii) Anti-virus.

b) Building a Home Theater Personal Computer (HTPC) requires specialized hardware to deliver a high-quality viewing experience for the customer. Explain the considerations of the following hardware when building HTPC. (5 marks)

i. Specialized power supply

ii. HDMI output

iii. TV tuners and cable cards

iv. Surround Sound

v. Specialized hard drive

Question FIVE (15 marks)

- a) A technician should understand the process and terms relating to hard drive setup. Explain the following terms. **(9 marks)**
- i. Primary partition.
 - ii. Active partition.
 - iii. Extended partition
- b) You are a computer tech savvy at Elaf Homely Meals Company. Your senior technician has reported a printer printed with unknown characters. Briefly explain two probable causes and two possible solutions. **(6 marks)**