



UGANDA BUSINESS AND TECHNICAL EXAMINATIONS BOARD

Business and Humanities Certificate Examinations

MAY-JUNE 2024 SERIES

PROGRAMME

NATIONAL CERTIFICATE IN COMPUTER MAINTENANCE AND REPAIR

NATIONAL CERTIFICATE IN INFORMATION COMMUNICATION AND
TECHNOLOGY

PAPER NAME

COMPUTER REPAIR AND MAINTENANCE (PRACTICAL)

PAPER CODE

NCCM122/NCICT122

YEAR I, SEMESTER II

3 HOURS

TUESDAY, 21ST MAY, 2024

INSTRUCTIONS TO CANDIDATES

1. *This paper consists of **one** compulsory question.*
2. *Answer all the parts of the question.*
3. *Observe all the safety precautions throughout the processes.*
4. *No communication between candidates is allowed during the examination.*
5. ***Do not** write anywhere in this question paper.*
6. *All rough work should be done in the official answer booklet provided.*
7. *Read other instructions on the answer booklet.*

Caution: Safety precautions must be exercised throughout this examination. Do not destroy or attempt to destroy any component presented to you.

PART I (HARDWARE) (60 MARKS)

Question

You are provided with a computer system labelled R. Study it carefully and perform the tasks required.

- (a) Study the status of specimen **R**. Describe the physical features of the specimen. (04 marks)
- (b) Open specimen **R** using the tools provided. List four internal components that are detachable from the casing of the specimen. (04 marks)
- (c) State the form factor of the casing. (02 marks)
- (d) Carefully extract the RAM module and describe its physical appearance. (03 marks)
- (e) Write down the capacity of the RAM module. If the module has the sticker, write down other specifications on the sticker. If it has no sticker, state how you identified the module capacity. (04 marks)
- (f) Study the motherboard. State the number of power connectors from the power supply that are connected to it and state the number of pins for each connector. (06 marks)
- (g) Name the manufacturer of the motherboard. Explain how you got the information. (05 marks)
- (h) Identify the number of expansion slots on the motherboard. (03 marks)
- (i) Identify and state the number of Hard Disk Drivers (HDDs) including CD/DVD drives that the motherboard can accommodate. Explain your answer. (04 marks)
- (j) Extract the motherboard from the casing. State the number of screws that are used to secure it to the casing. Care must be taken. (08 marks)
- (k) Measure the diagonal length of the motherboard and State it. (02 marks)
- (l) Reassemble all the components removed back to their positions. Care must be taken not to damage any component. (13 marks)
- (m) Connect the assembled computer to power and proceed to part II. (02 marks)

PART II (SOFTWARE) (40 MARKS)

- (a) Set the computer to perform POST. (02 marks)
- (b) Describe how you achieved the settings in Part II (a). (06 marks)
- (c) State the BIOS details of the HDD and RAM modules. (06 marks)
- (d) State the speed of the CPU fan and temperature of the processor. (06 marks)
- (e) Boot the computer and allow it to perform POST. State the information that was provided during POST. (04 marks)
- (f) Using the appropriate command(s), state the following information about the computer that you have;
 - (i) Model of the BIOS. (02 marks)
 - (ii) The processor details. (02 marks)
 - (iii) System model (02 marks)
 - (iv) Computer Name (02 marks)
- (g) Run disk defragmenter and state the percentage of fragmentation before analysis and after analysis. (08 marks)

END