



UGANDA BUSINESS AND TECHNICAL EXAMINATIONS BOARD

Business and Humanities Certificate Examinations

JULY-AUGUST 2022 SERIES

PROGRAMME

NATIONAL CERTIFICATE IN INFORMATION AND COMMUNICATION
TECHNOLOGY

PAPER NAME

BASIC COMPUTER MAINTENANCE
(THEORY)

PAPER CODE

NCIT222/2
YEAR II, SEMESTER II

2½ HOURS

WEDNESDAY, 10TH AUGUST, 2022

INSTRUCTIONS TO CANDIDATES

1. This paper consists of **two** sections **A** and **B**.
2. Section **A** is compulsory and carries **20** marks.
3. Section **B** consists of **six** questions. Answer only **four** questions from this section.
4. All questions carry equal marks.
5. All answers to each question should begin on a fresh page.
6. All answers and rough work should be done in the official answer booklet provided.
7. **Do not** write on the question paper.
8. Read other instructions on the answer booklet.

SECTION A - (20 MARKS)

Answer all questions in this section.

Question One

- (a) Differentiate between **RAM** and **ROM**. (04 marks)
- (b) State **three** disadvantages of a run to failure maintenance plan (RFMP). (03 marks)
- (c) Mention **four** reasons why a computer user would need a warm boot. (04 marks)
- (d) Distinguish between **primary** and **secondary memory**. (04 marks)
- (e) State **two** typical startup error messages displayed by the BIOS. (02 marks)
- (f) State **three** examples of ports that are found on the outside of a computer system. (03 marks)

SECTION B - (80 MARKS)

Answer only four questions from this section.

Question Two

Argon Internet Café hired you to perform a **preventive maintenance plan** on their computer systems which had started slowing down on the usage speed and performance.

- (a) Explain the meaning of the above plan. (02 marks)
- (b) State **four** benefits of the plan stated in 2(b) to the computer systems. (04 marks)
- (c) Mention **four** hardware tasks in regards to the plan stated in 2(b) that can be carried out on the systems. (04 marks)
- (d) If the plan required that you work inside and outside the systems, mention **five** safety precautions that you would take when working inside the system. (10 marks)

Question Three

- (a) Define the term **form factor** as used in computing. (02 marks)
- (b) Motherboards come in different form factors so as to ensure that all the necessary components needed by the computer system are held in one enclosure.
 - (i) Describe **four** system components that are held by the motherboard. (08 marks)
 - (ii) Explain **five** different types of form factors that the motherboard comes in. (10 marks)

Question Four

- (a) Define the term **tools** as used in computer maintenance. (02 marks)
- (b) Computer hardware repair and maintenance tool Kits come in a variety of sizes but all of them mostly contain the same hand tools. State **five** tools including their functionality that are found in most kits. (10 marks)
- (c) Explain **four** software utility tools that are used by a computer system to keep it at an optimized performance. (08 marks)

Question Five

- (a) Mention **three** elements that the hardware of a computer system requires to be able to operate. (06 marks)
- (b) State **four** ways of observing health and environmental safety during computer maintenance. (04 marks)
- (c) An operating system is the most important software that is installed in the computer system.
 - (i) Define the above system. (02 marks)
 - (ii) Explain **four** functionalities of the system in 5(c). (08 marks)

Question Six

- (a) Define the term **troubleshooting** as used in computing. (02 marks)
- (b) At Malcon computer workshop, a lot of computer systems intermittent problems are brought to your attention as the Assistant Technician. Most of these problems cannot be solved without going through a **troubleshooting process**.
 - (i) Explain **six** steps involved whenever carrying out the process stated in 6(b) on the system. (12 marks)
 - (ii) If most of the problems you receive at the workshop are because of the system overheating hence causing internal system components failure, mention **four** ways how you can solve the problem. (04 marks)
 - (iii) State **two** symptoms of a system facing the problem stated in 6(b)(ii). (02 marks)

Question Seven

- (a) Distinguish between a **primary storage** and **secondary storage** of a computer system. (04 marks)
- (b) Mention **two** examples in each case of the storage types in 7(a). (04 marks)
- (c) Many computer users perform a formatting procedure on their computer systems because of different reasons and purposes.
 - (i) Explain **four** main purposes of formatting a system hard drive. (08 marks)
 - (ii) Mention **four** steps that are passed through whenever carrying out the procedure in 7(c) on your external disk drive in windows. (04 marks)

END