



UGANDA BUSINESS AND TECHNICAL EXAMINATIONS BOARD

Business and Humanities Certificate Examinations

NOV-DEC 2022 SERIES

PROGRAMME

PROFESSIONAL CERTIFICATE IN SOFTWARE ENGINEERING

PAPER NAME

INTRODUCTION TO COMPUTER HARDWARE

PAPER CODE

PCSE121

YEAR I, SEMESTER II

3 HOURS

TUESDAY, 13TH DECEMBER, 2022

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.

Question One

PART I (HARDWARE) (60 MARKS)

You are provided with specimen labelled A to Z, study them carefully and answer the questions that follow;

- (a) Identify the specimens labelled A, B, C, D, E, F, G, H, I, X, and Z. (11 marks)
- (b) Assemble the specimens (A, B, C and D) together and connect the final assembled specimen into the main power source. (04 marks)
- (c) Boot the specimen A and state what happens. (04 marks)
- (d) If the occurrence(s) in part (b) requires that you look inside Specimen A:
 - (i) Using the provided specimen Z, open up the specimen A. (04 marks)
 - (ii) Observe the internal components in specimen A and mention four components, including their functionality, that are causing the occurrences in (b) above. (04 marks)
- (e) Perform the following on specimen F;
 - (i) Extract from its chassis. (02 marks)
 - (ii) Observe and write down the input voltage. (02 marks)
 - (iii) Observe and write down output maximum power. (02 marks)
- (f) Perform the following on specimen G;
 - (i) Extract from the chassis. (02 marks)
 - (ii) Write down the DOM. (02 marks)
 - (iii) State the capacity on the specimen. (02 marks)
 - (iv) Give the importance of the specimen. (04 marks)
- (g) Perform the following on the specimen H;
 - (i) Extract specimen H from its slots. (02 marks)
 - (ii) Observe and write down its capacity. (02 marks)
 - (iii) State **two** importance of specimen H to a computer. (04 marks)
- (h) Re-assemble specimen F, G and H into their respective slots in specimen A, connect to the motherboard using specimen(s) I. (09 marks)

PART II (SOFTWARE) (40 MARKS)

- (a) Power on the system and go to the boot setup menu. State the key that you pressed down to enter the menu. (04 marks)
- (b) While in the setup menu, change the boot sequence so that the system can boot from specimen **X**. (05 marks)
- (c) Insert specimen **E** into specimen **X**, and boot on the system. Install the software on specimen **E** onto specimen **A** and note the steps that you went through carrying out the installation. In case the hard disk of specimen **A** is running a Windows operating system, run a dual boot to install the software on specimen **E**. (20 marks)
- (d) After your installation, perform the following tasks;
 - (i) Create a user account "UBTEB2022" when it asks for the user name. Leave the password field blank. (05 marks)
 - (ii) Set the "Time and Date" to reflect the current date and time in Uganda today. (04 marks)
- (e) After the assessment by the UBTEB assessor, power off the computer system. (02 marks)

END