

KASNEB

CICT PART I SECTION 2

OPERATING SYSTEMS - PRACTICAL

TUESDAY: 22 November 2016.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

Ensure that you are provided with a computer, a flash disk and printing materials.

Additional instructions:

1. Save all your work (including theory answers where necessary) in the flash disk provided and in a folder bearing your registration number.
2. Work on each question should be saved in the subfolder contained in the folder created in number 1 above. The name of the subfolder should correspond to the question number.
3. Your registration number MUST appear as a header on every printout containing your answers.
4. You must indicate the number of the question answered on the header created in number 3 above.

Note: The information in numbers 1-4 above must be computer generated.

At the end of the examination duration, you should hand in to the invigilator(s):

- (a) The flash disk containing your work.
- (b) All printed work.
- (c) All unused printing paper(s).

QUESTION ONE

Create a word processor document named "Question One".

Use the word processor document to save your answers to questions (a) to (e) below:

- (a) Differentiate between "device directory" and "file directory" in the context of operating systems. (2 marks)
- (b) Mr. Mariki Ngondi intends to purchase a computer in which he could install Windows 8 Operating System.

Advise Mr. Mariki Ngondi on the minimum hardware configuration requirements in order to successfully install Windows 8 operating system. (4 marks)

- (c) Customise your computer's start menu to show the following:
 - (i) Run command. (2 marks)
 - (ii) System administrative tools. (2 marks)
 - (iii) Control panel. (2 marks)

Capture and save a screenshot indicating the above changes.

- (d) Set Windows Search Explorer as a default to open all file types and protocols.
Capture and save screenshots showing how you accomplished the above task. (4 marks)

- (e) Configure the following settings on your computer:
 - (i) Audio CD - To play CD using Windows Media Player. (1 mark)
 - (ii) DVD movie - To play DVD movie using Windows Media Player. (1 mark)
 - (iii) Software and Games - To ask me every time. (1 mark)
 - (iv) Video CD - To take no action. (1 mark)

Capture and save a screenshot showing the above settings.

Print "Question One" document.

(Total: 20 marks)

QUESTION TWO

Create a word processor document named "Question Two".

Use the word processor document to save your answers to questions (a) to (e) below:

(a) Explain the term "pre-emptive multitasking". (2 marks)

(b) Distinguish between a "workgroup" and a "domain" in the context of configuring computer networks. (4 marks)

(c) Change your computer display settings to require your computer to restart before applying any new display changes.

Capture and save screenshots showing how you accomplished the above task. (3 marks)

(d) (i) Use an appropriate tool to display the general properties of the mouse connected to your computer.

Capture and save the screenshot showing the mouse properties. (4 marks)

(ii) Ensure that your flash disk is plugged in the computer you are using.

Use an appropriate tool to show the value of the flash disk's ID's property.

Capture and save a screenshot displaying the flash disk's ID's property. (4 marks)

(e) Customise your console window to only show console tree, standard menu, status and description bar.

Capture and save a screenshot showing the above settings. (3 marks)

Print "Question Two" document.

(Total: 20 marks)

QUESTION THREE

Create a word processor document named "Question Three".

Use the word processor document to save your answers to questions (a) to (d) below.

(a) (i) Differentiate between "REG-SIZ" and "REG-BINARY" data types as used in the registry. (2 marks)

(ii) Highlight four ways in which registry problems could affect the computer system. (4 marks)

(iii) Configure your computer to display a message "Welcome to my PC" at start up using the registry editor.

Capture and save all screenshots displaying the steps you have taken to accomplish the above task. (4 marks)

(b) Use an appropriate utility to configure your computer to remove the Recycle Bin icon from the desktop.

Capture and save a framed screenshot displaying the configurations. (3 marks)

(c) Configure your computer to disable automatic searching of Windows updates for device drivers.

Capture and save a framed screenshot showing the above configuration details. (3 marks)

(d) (i) Use an appropriate software utility to display DirectX components window.

Capture and save a framed screenshot of the above window. (2 marks)

(ii) Capture and save a framed screenshot of the system configuration utility showing a list of all programs that run at start up. (2 marks)

Save and print "Question Three" document.

(Total: 20 marks)

QUESTION FOUR

Create a word processor document named "Question Four".

Use the word processor document to save your answers to questions (a) to (d) below:

- (a) Once a deadlock has been detected, a strategy is needed for recovery.
Assess three possible approaches to aid in deadlock recovery. (6 marks)
- (b) Capture and save screenshots displaying the following hard disk properties:
- (i) Hard disk policies. (2 marks)
 - (ii) Details of hard disk volumes. (2 marks)
 - (iii) Permissions for users granted for the hard disk. (2 marks)
- (c) Schedule a disk clean up task to occur every week on Saturday at 10:30 a.m. Ensure that a message with the following details is displayed prior to the start of the disk clean up:
- Title: Disk clean up.
Message: Beware! At the stated time, this computer will start disk clean up!
- Capture and save the windows showing all the steps taken to accomplish the above task. (4 marks)
- (d) Use an appropriate operating system utility to check for the existence of the following potential problems that could slow your computer's overall speed and performance:
- (i) Time before hard disk goes to sleep is too high. (2 marks)
 - (ii) Power plan is set to high performance. (2 marks)
- Capture and save a screenshot of a report showing the status of the above issues.
- Print "Question Four" document. (Total: 20 marks)

QUESTION FIVE

Create a word processor document named "Question Five".

Use the word processor document to save your answers to questions (a) to (d) below:

- (a) Differentiate between "a network operating system" and "a distributed operating system". (4 marks)
- (b) Capture and save screenshots showing how you would accomplish the following tasks:
- (i) Connect a bluetooth printer to your computer. (3 marks)
 - (ii) List all the running programs on your computer. (3 marks)
 - (iii) Troubleshoot a network problem. (2 marks)
 - (iv) Prevent hackers or malicious software from gaining access to your computer. (2 marks)
- (c) Create a standard user account named "KasnebOS" on your computer.
Capture and save a screenshot showing all the user accounts on your computer. (2 marks)
- (d) Create a subfolder named "Training" contained in the folder Question Five.
Share the Training subfolder with the user KasnebOS created in question (c) above giving him read only privileges.

Ensure that you capture and save the screenshots displaying the following:

- (i) KasnebOS as the person to share with "read only" privileges.
- (ii) The network path of the shared folder.

(3 marks)

(1 mark)

Save and print "Question Five" document.

(Total: 20 marks)