



“Investing in Africa’s Future”

COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCE

(CHANS)

NHIT100R Introduction to Information Technology

END OF SEMESTER FINAL EXAMINATION

NOVEMBER 2021 MAIN

LECTURER: T RUPERE

DURATION: 5 HOURS

Instructions to candidates

Answer one question from a total of 3

All questions carry equal marks (100)

Do not repeat material

Question 1 a) (41 marks)

a) Determine what an application software is, and provide two examples of this type of software.

[4 marks]

b) Give 2 examples of a spreadsheet and 2 examples of database application software and explain their use in business.

[8 marks]

c) Identify and name four things which are contained on the motherboard of a computer.

[4 marks]

d) Explain what the four main sections of a computer are, and what they do.

[8 marks]

e) Match each of the following software types with one of the statements shown below.

- | | |
|--------------------------|----------|
| i. Operating system | [1 mark] |
| ii. Application software | [1 mark] |
| iii. Utilities software | [1 mark] |
| iv. Programming software | [1 mark] |

1. Software which provides the computer with a set of instructions it can understand.	3. Software which allows end users to perform and fulfil their tasks.
2. A program that controls hardware and software.	4. Software which manages system resources.

f) A local primary school wants to install a laboratory to be used by the early child hood students. The laboratory should carry about seventy computers. Your role as someone who is an expert in computers is to advise the school headmaster and the parents committee on the best way of acquiring and furnishing the laboratory with the computers. Advise appropriately

[13 marks]

Question 1 b) [23 marks]

Using Microsoft Office Word, type the following text as it appears and then save your document as **question1** in a folder named after your name that must be on the desktop of your computer.

E-LEARNING

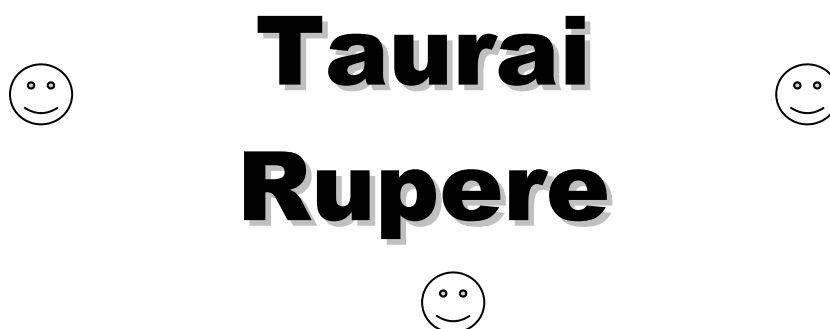
Itmazi and ®Tmeizeh (2008) claim that e-learning^{oscar} became a hot topic in the 1990's after the spread of the Internet. More specifically, e-learning became a hot topic on the 20th of June in 1992. Furthermore, They Aver That, Although E-Learning Has A Relative Short History, It Is Becoming An Important Part Of Learning. The majority of the universities adopted some

kinds of e-learning within their learning systems. They define e-learning as any learning that could be realized in a computer connected generally with an Internet or Intranet network.

Harare University

Faculty	Departments	Students	Fees Per Semester	Contact Details
Science	10	5000	\$1000.30	me@science.uz.ac.zw
Commerce	4	4000	¥2000.45	us@commerce.uz.ac.zw
Medicine	6	1000	€4345.90	you@medicine.uz.ac.zw
Agriculture	4	6000	£400.09	them@agriculture.uz.ac.zw

The table above shows information about Harare University. The enrolment is expected to be $y^{2x} \div \frac{1}{4}y^{5x} + 3_{4x} \geq 0$ in three years time! This is quite interesting, isn't it? See the art below, I am sure it is boring.



Question 1 c) [36 marks]

The question is based on Question 1b. Open the document that you prepared in question one above and copy **only** the **first paragraph** titled '**E-LEARNING**' and paste it in a blank ©Microsoft Office Word document then save it as **question2** again in the same folder that you created in Question1, then format the text as follows:

- i. Set the font size of the heading '**E-LEARNING**' to 29, font colour of this heading to red, **and** align this heading to the right.
- ii. Set font colour for the text in the paragraph to blue (don't change the colour of the heading)
- iii. Set font type or face for the whole document to Tahoma
- iv. Make the first and last sentences of this paragraph bold.
- v. Make the text the paragraph aligned to the right.
- vi. Change the case of the paragraph to uppercase.
- vii. Underline the first and last sentences of the paragraph.
- viii. Italicise the second sentence from last in the paragraph.
- ix. Place any page border around your text
- x. Set line spacing for the paragraph to 2.3

- xi. Insert page numbers (use roman numerals number format) on the top right corner of each page.
- xii. Insert a header “Microsoft Word” on your document and align it to the centre of the page.
- xiii. Insert any picture from your computer at the end of the paragraph and the picture must be aligned to the centre of the document.

Question 2 a) (25 marks)

- i. Give and explain three functions of the control unit [6 marks]
- ii. Give 3 types of printers you know and explain how they operate [6 marks]
- iii. Give two advantages of secondary storage [4 marks]
- iv. Using any word processor you know:
 - a. explain how you put bullet numbering [3 marks]
 - b. page numbering [3 marks]
 - c. a picture in your document and to save the file using the name **Exercise**. [3 marks]

Question 2 b) (25 marks)

- i. Draw and illustrate the operation of the computer with the main functions of the CPU. [6 marks]
- ii. State and explain the five basic functions of the operating system. [10 marks]
- iii. What do you understand by the following operating system features?
Select any three and explain briefly.
 - a. multi-tasking,
 - b. multi-processing,
 - c. batch processing,
 - d. Multi user and virtual memory.
 [9 marks]

Question 2 c) (50 marks)

Using the same workbook as question select another worksheet and name it Employees.

- a) Populate the data below and give an appropriate heading [8]

Employee	Name	Date	Department	Salary US
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Number		employeeed		
E001	Pelagia	5Jan 2011	Finance	800
E002	Tawanda	22Mar 2011	IT	900
E003	Tendai	1Jan 2011	Accounts	600
E005	Packs	22 Feb 2011	HR	700
E004	Irene	05Jan 2011	Exams	650

- b) Insert another student E006 called Bismark who works in the Finance department and earn \$350.00
[4]
- c) Each worker is to be awarded a salary increment of 35% effect from this month. Calculate the salary increment and the amount each worker is going to earn. [10]
- d) All the workers who were employed in January this year are to be given a grocery allowance of \$250.00 and credited to their salaries. Use appropriate formula to calculate the salaries to be earned.
[10]
- e) All the workers now earning more than \$1 000.00 are to be grouped in grade A while the rest are in Grade B. Use appropriate formula to group the workers. [10]
- f) Create a graph to show the salaries and Employees and comment on the graph. [8]

Question 3 a) [25 marks]

- a) Discuss the relevance of Internet in modern world.
[8]
- b) Explore the security issues due to the use of Social media.
[8]
- c) With diagrams, describe the three types of network topology.
[9]

Question 3 b) (25 marks)

Create a presentation with ten slides about a soccer match.

Make the following changes to the presentation (answer questions in the order they appear):

- i. Delete the first and last slides and then save the presentation
- ii. Insert date and time on all slides and the date must update automatically (use any date format)
- iii. Insert slide numbers all slides
- iv. Insert a new slide after the eighth slide and type your name in the title section and
then insert any image from your computer in the text section
- v. Change layout of all slides to 'Title and Content'
- vi. Change the font type of all slides to 'Times New Roman'
- vii. Apply a design called 'Flow' to all slides

- viii. Apply an animation called 'Dissolve' to the first and last slides and an animation called 'Wipe Up' to the rest of the slides.
- ix. Set transition sound for all slides to 'Applause', transition speed to 'medium'.
- x. Set time so that each slides advances after 00:01
- xi. Hide the second slide from last

Question 3 c) (20 marks)

Draw a chart as shown below. Your chart must be a standalone slide in the same presentation that you prepared for the first part of this question. This must be the second slide in your presentation.

Question 3 d) [30 marks]

Enter the following information into an Excel spreadsheet. Save your work book as **question3**. You must password protect your work book. Use **question3** as the both the password to open and to modify.

Reg#	Program	TEST1/1	TEST	TEST2/1
R03K	HCT	14	33	47
R01D	BSCT	39	39	56
R06F	HCT	58	30	43
R06C	HCT	27	31	44
R06E	BSC	33	31	44
R07X	HCT	33	42	60
R06Q	BSCT	25	40	57
R09Y	BSCT	34	47	67
R07P	HCT	20	19	27
R06H	BSCT	56	58	83

- i. Add a column after the last one and name it "Average Mark/100" then calculate the average mark for each student. (use only the columns headed Test1/100 and Test2/100)

- ii. Sort the values in the table by programme
- iii. Draw a bar chart showing the marks for Test1/100, Test2/100 and Average Mark/100 for each student. (the chart must have Reg# on the x-axis and mark on the y-axis)
- iv. The legend must be placed at the bottom of the chart
- v. Label the x-axis 'Students' and the y-axis 'Marks'
- vi. The title of the chart is 'Theory of Computation Marks'
- vii. Rename the sheet from Sheet1 to q3a and change the tab colour for this sheet to red

The end