

### *"Investing in Africa's future"* COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

### NHIT100- INTRODUCTION TO INFORMATION TECHNOLOGY

END OF FIRST SEMESTER EXAMINATIONS NOVEMBER 2022

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TIME: 3 HOURS

### **INSTRUCTIONS**

Answer ALL questions as instructed in each section

The marks allocated to **each** question are shown at the end of the question.

Create a folder on your desktop and put your student number as the name of the folder (for example 210708)

Credit will be awarded for logical, systematic and neat presentations.

# Section A Microsoft Word [30 marks]

# Word Question One

You're the Attachment coordinator of the class of 2022.You are required to write an attachment letter to 5 companies seeking attachment places for your 5 students. All you have are their First Names, Surnames, Student Number, Company Names, name of degrees that they are doing and company's Physical Addresses. Utilize the mail merge to come with the 5 letters for your students. Use the Sample Below

28 September 2020

<Company Name> <Company Address)

Dear Sir/Madam

#### **RE: REQUEST FOR INDUSTRIAL ATTACHMENT PLACE**

I write to seek your assistance in providing an opportunity for industrial attachment in your organization for our undergraduate student(s) <First Name> <Surname> # <Student Number >.

He/she is currently doing an Honours Degree in <degree name>. Your help and assistance will be greatly appreciated.

Yours sincerely

AU Attachment Coordinator

Save the file in your folder as Attachment Letters [10]

### Word Question two

Type the following text as it is. Save it in your folder as System Development Life Cycle

• System Development Life Cycle

System Development Life Cycle (SDLC) is a conceptual model which includes policies and procedures for developing or altering systems throughout their life cycles.

SDLC is used by analysts to develop an information system. SDLC includes the following activities :

- requirements
- design
- implementation
- testing
- deployment
- operations
- maintenance

#### Phases of SDLC

Systems Development Life Cycle is a systematic approach which explicitly breaks down the work into phases that are required to implement either new or modified Information System.

Feasibility Study or Planning

- Define the problem and scope of existing system.
- Overview the new system and determine its objectives.
- Confirm project feasibility and produce the project Schedule.
- During this phase, threats, constraints, integration and security of system are also considered.
- A feasibility report for the entire project is created at the end of this phase.

### Analysis and Specification

- Gather, analyze, and validate the information.
- Define the requirements and prototypes for new system.
- Evaluate the alternatives and prioritize the requirements.
- Examine the information needs of end-user and enhances the system goal.
- A Software Requirement Specification (SRS) document, which specifies the software, hardware, functional, and network requirements of the system is prepared at the end of this phase.

### System Design

- Includes the design of application, network, databases, user interfaces, and system interfaces.
- Transform the SRS document into logical structure, which contains detailed and complete set of specifications that can be implemented in a programming language.
- Create a contingency, training, maintenance, and operation plan.
- Review the proposed design. Ensure that the final design must meet the requirements stated in SRS document.
- Finally, prepare a design document which will be used during next phases.

### Implementation

- Implement the design into source code through coding.
- Combine all the modules together into training environment that detects errors and defects.
- A test report which contains errors is prepared through test plan that includes test related tasks such as test case generation, testing criteria, and resource allocation for testing.
- Integrate the information system into its environment and install the new system.

Maintenance/Support

- Include all the activities such as phone support or physical on-site support for users that is required once the system is installing.
- Implement the changes that software might undergo over a period of time, or implement any new requirements after the software is deployed at the customer location.
- It also includes handling the residual errors and resolve any issues that may exist in the system even after the testing phase.
- Maintenance and support may be needed for a longer time for large systems and for a short time for smaller systems.

Make the heading 'System Development Life Cycle" and Phases of SDLC Heading 1
(2)

2. Make all other sub-headings **Heading 2** (4)

3. Change the heading "Phases of SDLC" to bold, italic and double underline it (3)

4. Insert a table of contents above the Heading 'System Development Life Cycle" (3)

5. Change all the heading to font size 16, font color of your choice and font type to MS GOTHIC (3)

6. Drop Cap the letter "S" for System in the first paragraph of System Development Life Cycle (2)

7. Insert Header and footer as page number and your registration number (3)

Save the file in your folder as System Development Life Cycle [20]

# SECTION B [10 marks]

Design a Microsoft power point using the topic" **System Development Life Cycle**" from A above.

The presentation should have the following

a. The main title slide to introduce the topic under presentation (1)

- b. At least five other slides with a title and content of the slide (use content from MS Word Question above ) (2)
- c. Each slide should have a slide number and your student number as footer (3)
- d. Theme and background style of your choice (2)
- e. Slide transitions of your choice (2)

Save the file in your folder as *SDLC* 

### **SECTION C Microsoft Excel [30 Marks]**

	A	В	С	D	E	F					
1	USA Annual Purchases Report 2011										
2	Customer ID	Gender	City	Education	Annual Purchases	Annual Salary					
3	C11	M	New York	University	\$6,233	\$7,500					
4	C12	M	New York	High School	\$4,233	\$4,999					
5		F	Seattle	University	\$6,560	\$6,750					
6		М	Chicago	University	\$5,001	\$12,000					
7	3	F	New York	University	\$7,034	\$17,500					
8		F	Chicago	University	\$5,345	\$13,150					
9		F	Seattle	High School	\$790	\$3,799					
10		F	Seattle	None	\$240	\$2,150					
11		М	Seattle	University	\$4,300	\$22,450					
12	¥	f	New York	None	\$232	\$2,500					
13											
14											
15	City	Total Annual Purchases		Annual Salary	Gender						
16	New York	?		City	Male	Female					
17	Chicago	?		New York	?	2					
18	Seattle	?		Chicago	?	?					
19				Seattle	?	?					
20	Education	Average Annual Purchases									
21	University	?									
22	High School	?									
23	None	?									
24											
25	Gender	Population									
26	Male	?									
27	Female	2									

Open a new workbook and save the file as USA Annual Purchases Report.

- a. Enter the labels and values in the exact cell locations as desired. [1]
- b. Use AutoFill to insert the Customer IDs. [1]

- c. Set labels alignment appropriately. [1]
- d. Use Warp Text, Text Orientation and Merge Cells as desired. Apply borders, gridlines and shading to the table as desired. Format Column E & D to Currency with dollar sign and two decimal places. [3]
- e. Find the Total Annual Purchases for each City. [3]
- f. Find the Average Annual Purchases for each Education.[3]
- g. Find the total number of each gender. [2]
- h. Find the total annual salary for each gender in each city. [6]
- i. Create the following Chart [10]







### **SECTION D Microsoft Access [30 Marks]**

a) Activate a database package that you are familiar with and create a database file "ZIMMOTORS"

Vehicle No Plate	Name	Туре	Manufactured Date	Country of Origin	Price \$ US
AAJ275	Toyota	Pickup	05/02/04	Japan	\$ 2420
AAC576	Mazda	Sedan	03/05/03	Japan	\$1700
AAB348	Ford	Pickup	11/10/03	USA	\$1300
AAJ485	Nissan	Station wagon	12/08/03	Japan	\$1600
AAF762	Peugeot	Pickup	12/11/00	France	\$1800
AAK578	Jaguar	Sedan	03/08/06	Britain	\$ 2900
AAC285	BMW	Sedan	05/03/03	Germany	\$ 2700
AAB590	Toyota	Pickup	10/12/02	Japan	\$ 1610
AAK372	Toyota	Pickup	12/05/01	Japan	\$1420

b) Create a table within this database and use the following structure, set all the fields to their appropriate data types and Vehicle No Plate as primary key.

c) Save the table as CARSTABLE and produce a printout. (9 marks)

d) Insert another column after Type and label it Color and enter colors of your choice and save the table as CARSTABLECOLOR. (3 marks)

e) Create a query to retrieve all Toyota vehicles, of type pickup whose price is above \$1500. Name the query Toyota 1 and print it (4 marks).

f) Create a query to retrieve all vehicles manufactured from January 2003 up to June 2003, name that query, date query and print it (2 marks).

g) Create a query to retrieve all vehicles manufactured in Japan and name that query Japan and print it. (1 mark)

h) Create a form taking data from CARSTABLE but without the field Price and name that form Cars Form and produce a print out. (2 marks)

i) Create a form to display cars from Japan and add four more records in this form, save it as Japan form and then print. (4 marks)

j) From the query Toyota 1 create a report and name it Toyota Express and print. (4 marks)

### **END OF PAPER**