



**COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE**

**NCIS211 – WEB TECHNOLOGIES**

**END OF FIRST SEMESTER EXAMINATIONS**

**NOVEMBER 2022**

**LECTURER: MR MUKHALELA**

**DURATION: 3 HRS**

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### **INSTRUCTIONS**

Answer any **ALL** questions in Section A.

Answer any **TWO** questions in Section B using the allocated answer booklet.

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

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

### **Section A-Compulsory mini-project exam Question.**

#### **Question 1.**

Design an ERD for a hospital that you have just joined as a Web technologist. Include the following entities: Doctor, Ward, Patient, Drug, Bed and other entities of your choice. (25)

#### **Section B**

### Question 2.

- a. Write code snippet for a php script that indicate variables to connect to a MySQL database. Include the method you can use to connect to the database. (10)
- b. Write an SQL statement for creating a new table called Lecturer and include both data type and other constraints, Include only 4 columns on the table. (5)
- c. Write down the meanings of the following abbreviations as used in Web Technologies:
  - DNS
  - AWS
  - DHCP
  - JSOON
  - XML(5)

### Question 3.

Server-side scripting can be done using any of the following technologies;

- Python
- JSP
- ASP.Net and
- AJAX etc

Using any one of the technologies of your choice, write brief notes and code snippets on how the chosen technology is used to connect a form to a database server. (25)

### Question 4

- a. From Question one above, identify any one entity which you shall code an html form for, be creative. (15)
- b. Write html code snippets for an ordered list to be included in you web application, you have been told that the list should have 5 items and each should be centered, bold and italicized upon display. (5)
- c. Using html code snippet, show how you will put a picture on a website. (5)

### Question 5

Describe the three-tier-architecture as used in modern dynamic web technologies. (25)

### Question 6

- a. Explain the usefulness of XML in Web technologies, illustrate using xml code. (10)
- b. React is a highly useful web technology in todays web driven undertakings, citing examples illustrate how a modern organization can manipulate React as web technologies framework. (15)

**End of Examination**