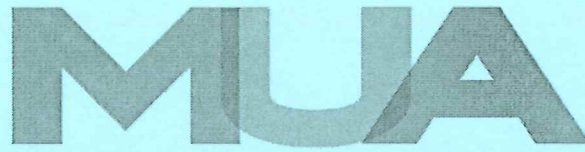


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DIPLOMA UNIVERSITY EXAMINATIONS

SCHOOL OF MANAGEMENT AND LEADERSHIP

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

DIT 203 : CONCEPTS OF INTERNET BASED PROGRAMMING

DATE: 28TH MARCH 2022

DURATION: 2 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **FOUR** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **10 MARKS** each.
7. **Write all your answers in the Examination answer booklet provided.**

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

The Internet is a vast network of computers, and server's, which communicate with each other. The internet connects with the whole wide world together.

Prior to the internet, the custom framing industry was one that was extremely localized and it is well known that the internet has changed the way many businesses compete and operate.

Web design is quite complex, but with the development of Internet and technology, becoming a web designer has become the main trend.

According to Krug's first law of usability, the web-page should be obvious and self-explanatory. When you're creating a site, your job is to get rid of the question marks – the decisions users need to make consciously, considering pros, cons and alternatives.

The visitor of the page is the only person who clicks the mouse and therefore decides everything, user-centric design has established as a standard approach for successful and profit-oriented web design

A good website designer gives an organization the opportunity to have their website designed to fit your specifications and suit the organization's needs.

Required:

- a) Discuss the FOUR functions of a website [8 MARKS]
- b) Analyze THREE classifications of websites [6 MARKS]
- c) Discuss the process of web designing [7 MARKS]
- d) Security of data is paramount to existence in this information world. Assess the importance of having SSL in a website domain [3 MARKS]
- e) Describe several strategies of developing a good web design [6 MARKS]

QUESTION TWO

- a) Discuss THREE main features of an email application [6 MARKS]
- b) List TWO web server software [1 MARKS]
- c) Evaluate THREE (3) characteristics of HTML for the widespread use to develop web sites. [3 MARK]

QUESTION THREE

- a) Explain OOP approach to programming [2 MARKS]
- b) Define the difference between
 tag and <P> HTML tags [2 MARKS]
- c) Describe the client server architecture [6 MARKS]

QUESTION FOUR

- a) Explain the three components of the CIA security triad [6 MARKS]
- b) Illustrate TWO different ways that CSS supports the DRY (Don't Repeat Yourself) principle [4 MARKS]

QUESTION FIVE

- a) Given the following pairs of potential attacks demonstrate the effective countermeasures [6 MARKS]
 - i. SQL injection
 - ii. Session hijacking
- b) Discuss the following issues as regarding web design, internet, and information [4 MARKS]
 - i. Legal
 - ii. Ethics

QUESTION SIX

- a) Asses the use of class attribute in CSS [6 MARKS]
- b) Differentiate between IP and SMTP [2 MARKS]
- c) Evaluate TWO types of lists that can be created in HTML [2 MARKS]

