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*... Bastion of Knowledge ...*

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ACADEMICS, STUDENT AFFAIRS AND RESEARCH

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# UNIVERSITY EXAMINATIONS

## 2021 /2022 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER REGULAR EXAMINATION

**FOR THE DEGREE OF BACHELOR OF  
COMPUTER SCIENCE**

**COURSE CODE: COM 216**

**COURSE TITLE: FUNDAMENTALS OF THE INTERNET**

**DATE: 2<sup>ND</sup> FEBRUARY, 2022 TIME: 0900 – 1200 HRS**

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### INSTRUCTION TO CANDIDATES

- SEE INSIDE

THIS PAPER CONSISTS OF 3 PRINTED PAGES

PLEASE TURN OVER

**REGULAR EXAM**

**COM 216: FUNDAMENTALS OF THE INTERNET**

**STREAM: COM**

**DURATION: 3 Hours**

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**INSTRUCTION TO CANDIDATES**

Answer **ALL** questions from section A and any **THREE** from section B.

**SECTION A [24 MARKS] ANSWER ALL QUESTIONS.**

**QUESTION ONE [12 MARKS]**

a) For each of the following, state what the acronym stands for AND briefly explain its purpose:

- i. HTML
- ii. FTP

[2 Marks]

b) Outline the role of protocols as applied to the Internet and name THREE protocols frequently used on the Internet.

[ 3 Marks]

c) Explain the working of TCP/IP protocols.

[2 Marks]

d) State the Standards Organization that developed the OSI Model?

[1 Mark]

e) What is a Domain Name?

[2Marks]

f) How do you implement Subnet addressing?

[2Marks]

**QUESTION TWO [12 MARKS]**

a) List and explain the basic requirements to able to access the Internet

[4 Marks]

b) Assume you work for an organization and you have been charged with the responsibility of selecting an ISP (Internet service Provider) for your organization; briefly explain the factors that you would consider to guide you into selecting an appropriate Internet service provider for the organization?

[6 Marks]

- c) Explain in details how the web works? Give an example of how the process works; describe the language that web clients and servers use to communicate with each other [2 Marks]

**SECTION B [36 MARKS]**

**QUESTION THREE [12 MARKS]**

- a) Define email client program and explain how it can be used today [4 Marks]
- b) i. Explain the term “domain name service” (DNS) [2 Marks]
- ii. Describe the role played by the DNS in making the internet easy to use [4Marks]
- c) Why is the number of internet top level domains deliberately kept low [2 Marks]

**QUESTION FOUR [12 MARKS]**

- a) Describe the three parts of a computer host name. [3 Marks]
- b) Techniques and tools for searching the internet are imperative if one is to find useful information on the internet. Describe three types of searches that are common today [6Marks]
- c) Define a blog [3Marks]

**QUESTION FIVE [12 MARKS]**

- (a) Explain what you understand by the term Uniform Resource Locators (URLs)? [2 Marks]
- (b) Describe the URL concept and structure of URL addresses. [4 Marks]
- (c) (i) Differentiate between Newsgroups and E-mail. [2 Marks]
- (ii) What is Gopher space; explain its concept and how it slightly differs with internet concept [4 Marks]

**QUESTION SIX [12 MARKS]**

- (a) Identify THREE common Internet security risks and explain the measures that can be taken against each. [6 Marks]
- (b) What is the standard language the web uses for creating and recognizing hypermedia documents? Briefly explain the characteristics of the language leading to its preference? [4 Marks]
- (c) State briefly what a Telnet is and explain its purpose: [2 Marks]

**QUESTION SEVEN [12 MARKS]**

(a) For each of the following, state what the acronym stands for AND briefly explain its purpose:

i. URL

ii. HTTPs

[4 Marks]

(b) Explain different types of URLs

[4 Marks]

(c) What is Internet security and why it is important?

[2 Marks]

(d) What is a search engine and how does it work?

[2 Marks]

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