

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE AWARD OF
BACHELOR OF SCIENCE APPLIED COMPUTER SCIENCE**

ACSC 475: WEB MEDIA TECHNOLOGIES

STREAMS: BSC. APPLIED COM SCI

TIME:2 HOURS

DAY/DATE: THURSDAY 5/12/2019

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

- Answer Question **ONE** and any other **TWO** questions.
- Diagrams should be used whenever they are relevant to support an answer.
- Sketch maps and diagrams may be used whenever they help to illustrate your answer
- Do not write anything on the question paper
- This is a **closed book exam**, No reference materials are allowed in the examination room
- There will be **No** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION

QUESTION ONE [30 MARKS]

- a) List and describe the three categories of hackers. Explain why each of these hackers are of concern in web media technologies [9 Marks]
- b) Identify and explain the five multimedia components [5 Marks]
- c) Describe four instances for which you may want to apply NDAs [4 Marks]

- d) List and explain any five reasons why innovation hubs are important in web media technologies [5 Marks]
- e) Differentiate between websites and web applications [4 Marks]
- f) Discuss the impact of software on the state of Arianne 5 [3 Marks]

SECTION B

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO [20 MARKS]

- a) KENIA is a government initiated institution in Kenya
 - i. Explain the role of KENIA [4 Marks]
 - ii. Describe any three benefits of KENIA to web media developers [6 Marks]
- b) As a Computer Scientist, explain any four approaches you would take to protect your trade secrets. [4 Marks]
- c) An Organization is considering whether to access their in-house system through wireless network or wired network.
 - i. Advice the Organization why they should consider wired over wireless network [3 Marks]
 - ii. Advice the Organization why they should consider wireless over wired network [3 Marks]

QUESTION THREE [20 MARKS]

- a) A client requires a web media urgently. You must make a choice of the right technologies in order to produce the request in the shortest time possible yet maintain a professional look

- i. Point out three reasons why you may opt for a development framework rather than from scratch development [6 Marks]
 - ii. Identify any four PHP development frameworks that you could consider for this project [4 Marks]
- b) Identity theft is something that web media creators should be aware of.
- i. Explain what identity theft is [3 Marks]
 - ii. Highlight three types of Identity theft [3 Marks]
 - iii. Describe any two mechanisms by which identity theft is effected [4 Marks]

QUESTION FOUR [20 MARKS]

- a) Explain each of the following Intellectual Properties in reference to computer science
- i. Patents [2 Marks]
 - ii. Copyrights [2 Marks]
 - iii. Trade Mark [2 Marks]
- b) Backup is very important in web media development:
- i. Identify any three reasons why backup is important in web media. [3 Marks]
 - ii. Describe the three types of backup [6 Marks]
- c) Procedures and functions are used a lot in professional software development.
- i. Differentiate between a procedure and a function [2 Marks]
 - ii. Explain why procedures and functions are necessary in software development [3 Marks]

QUESTION FIVE [20 MARKS]

- a) Identify three types of malware and describe how each affects web media [6 Marks]
- b) Explain why the following are important to web media developers
- i. Web root [2 Marks]
 - ii. Loopback address [2 Marks]
 - iii. Proxy Server [2 Marks]
 - iv. DNS Server [2 Marks]
- c) Judy is a professional web developer. Judy uses comments a lot while programming.
- i. Highlight any three reasons why Judy uses comments [3 Marks]
 - ii. Assuming Judy is programming using PHP, demonstrate how to display comments in PHP [3 Marks]
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