

CHUKA



UNIVERSITY

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UNIVERSITY EXAMINATIONS

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

ACMP 426: WEB MEDIA TECHNOLOGIES

STREAMS: BSC. APPLIED COMPUTER SCIENCE

TIME: 2 HOURS

DAY/DATE: MONDAY 17/12/2018

11.30 A.M. – 1.30 P.M.

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**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 five components of multimedia. [5 Marks]
- b) Identify the four multimedia attributes. [4 Marks]
- c) Discuss factors to consider when using images in a web creation. [4 Marks]
- d) Explain any two advantages and any three considerations when using animations in a website. [5 Marks]

- e) Highlight the role of sound in a web application. [4 Marks]
- f) Describe three negative areas whose growth is impacted by identity theft. [6 Marks]
- g) Identify any four application areas of web media technologies. [2 Marks]

## **SECTION B**

### **ANSWER ANY TWO QUESTIONS FROM THIS SECTION**

#### **QUESTION TWO [20 MARKS]**

- a) Explain what Intellectual Property is. [2 Marks]
- b) Describe the different roles played by each of these bodies in Intellectual Property rights protection:
  - i. KIPI. [4 Marks]
  - ii. KECOBO. [4 Marks]
- c) Differentiate between Trademarks and Trade secrets. [2 Marks]
- d) As a Computer Scientist, explain any four approaches you would take to protect your trade secrets. [8 Marks]

#### **QUESTION THREE [20 MARKS]**

- a) There are practices carried out by software developers which negatively impact on the security of the software developed. Discuss any five of these practices clearly showing how they affect software security. [10 Marks]
- b) The National Fiber Optic cabling project is a government of Kenya initiated and owned project. Discuss the impact of this project to web media technology development. [10 Marks]

#### **QUESTION FOUR [20 MARKS]**

- a) The Kenya Computer Misuse and Cybercrimes Bill 2018 was recently signed into law. Discuss referencing sections of the Bill, what this means to web media technology developers. [10 Marks]
- b) Identify any four known innovation hubs for computer scientists. [4 Marks]
- c) Discuss why a Software developer would be encouraged to be part of an innovation hub. [6 Marks]

**QUESTION FIVE [20 MARKS]**

- a) Discuss how the Konza City will impact the software development industry in Kenya. [7 Marks]
- b) All web developers must take into consideration the effect of hackers during every step of the development.
- i. Identify the different types of hackers. [3 Marks]
  - ii. Explain how hackers can positively influence your development. [6 Marks]
  - iii. Describe the role of users in computer systems hacking. [4 Marks]
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