FACULTY OF SCIENCE AND TECHNOLOGY

END OF SEMESTER EXAMINATIONS - MAY 2024/2025

PROGRAMME: MIT

YEAR/SEM: YEAR 1/SEMESTER 2

COURSE CODE: MIT720

NAME: CONTEMPORARY ISSUES IN IT

DATE: 2025-08-05

TIME: 2:00-5:00PM

INSTRUCTIONS TO CANDIDATES:

1. Read the instructions very carefully

2. The time allowed for this examination is STRICTLY three hours

3. Read each question carefully before you attempt and allocate your time equally between all the Sections

4. Write clearly and legibly. Illegible handwriting cannot be marked

5. Number the questions you have attempted

6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks

7. Any examination malpractice detected will lead to automatic disqualification.

DO NOT WRITE ANYTHING ON THE QUESTION PAPER

Section A Attempt all questions

Question 1:

Pearl Safaris, a Ugandan tour operator, recently digitized all customer data, storing it on an internal server and a cloud CRM (customer relationship management) system. A small data breach exposed customer emails due to a misconfigured firewall, prompting management to reinforce IT professionalism and data security. The IT team includes a Network Administrator (John), a Junior IT Support Specialist (Sarah), and an external IT Consultant (David).a. Define Professionalism in IT for Pearl Safaris' IT team, and explain how John, Sarah, and David can demonstrate it daily. (8 marks)b. Discuss which core principles of IT professionalism were likely violated, leading to the data breach, and how adherence could have prevented it. (8 marks)c. Pearl Safaris is considering IT certifications for John and Sarah in cybersecurity and cloud security; explain the benefits and challenges of these certifications. (10 marks)d. Considering Uganda's digital transformation, discuss how Pearl Safaris' IT professionals can contribute to building trust in technology and promoting digital literacy within the community after the data breach. (4 Marks) e. Give one example of original creation, innovation, or branding element for which the company could seek protection under each of the following intellectual property rights: (2 marks each)(i) Copyright(ii) Patent(iii) Trademark(f) Briefly explain how obtaining such intellectual property rights in (e) above, would benefit Pearl Safaris in the long run (4 marks)

Section B Attempt a maximum of 3 questions.

Question 1:

You are the founder of a tech start-up in Uganda that has developed an innovative mobile payment application called SmartPay, which relies on a unique algorithm for its competitive edge. As your business grows, you become concerned about the risk of losing this valuable trade secret. (a) What are the improper means by which inventors or companies like yours might lose trade secrets in Uganda? Describe these in detail (8 marks) (b) What strategies can you implement to minimize the possibilities of losing trade secrets in Uganda? Explain in detail.(12 marks)

Question 2:

(a) Explain the key characteristics that distinguish a "profession" (12 marks)(b) How do IT workers fit the legal definition of a professional? (8 marks)

Question 3:

Explain any five types of trade marks (4 marks each)

Question 4:

(a) Why should a business person register a trademark for a product or service? (10 marks)(b) Explain the steps for registering for a trademark   (10 marks)

Question 5:

Imagine you are part of the academic committee at a prestigious university in Uganda. Recently, the administration has noticed a rise in cases of plagiarism among students, particularly in their research projects and assignments. Task: Propose five effective strategies to control plagiarism in this context. (20 marks)

Question 6:

(a) Discuss four specific ethical issues that can arise in the relationship between IT professionals and their employers (10 marks)(b) Explain the difference between a bribe and a gift in the context of IT professional relationships with suppliers