

**FACULTY OF SCIENCE AND TECHNOLOGY  
END OF SEMESTER EXAMINATIONS - APRIL 2025**

**PROGRAMME: MIT**

**YEAR/SEM: YEAR 1/SEMESTER 1**

**COURSE CODE: MIT717**

**NAME: CYBER LAW AND IT ETHICS**

**DATE: 2025-04-14**

**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 This section is compulsory - Carries 40 Marks

### Question 1:

#### **QUESTION 1 (40 MARKS)**

- i. Contrast between Law and Ethics (04 Marks)
- ii. Describe at least two Common Ethical Issues for IT Users (04 Marks)
- iii. Law is divided between Criminal and Civil Law, distinguish between these two, giving IT related examples in each case. (04 Marks)
- iv. Among the unethical issues which can be triggered by the Internet are cyber stalking, cyber harassment, electronic fraud and child pornography. Explain what you understand by each of those terms, giving examples in each case. (08 Marks)
- v. Discuss some of the remedies which you think need to be put in place to address the cybercrimes or unethical cyber behaviours mentioned in number v above. (08 Marks)
- vi. **Copyrights** and **Patents** are established ways of protecting **Intellectual Property** Rights. Describe the purpose of each of these approaches and explain how each of them can be used to protect the **Innovators Rights** (04 Marks)
- vii. A software company discovers that pirated versions of its software are being distributed on a popular file-sharing site. The company contacts the site's host, asking it to remove the pirated files, but the host refuses, claiming it is not responsible for user-uploaded content. Analyze the company's legal options under copyright law, including the use of takedown notices and potential lawsuits. (04 Marks)
- viii. A social media platform is criticized for allowing fake news about a public health crisis to spread unchecked. The government suggests that platforms should be required to verify the accuracy of all health-related posts, but the platform argues that doing so would limit free speech. What measures could they take to address misinformation without infringing on free speech rights? (04 Marks)

## Section B Attempt Any Four Questions from this section - Each question carries 15 marks

### Question 1:

#### **Question #5: Whistleblowing and Corporate Loyalty (15 Marks)**

While working as a cybersecurity consultant, you discover that a client is storing customer passwords in plain text, making them highly vulnerable to breaches. When you raise this issue, management dismisses your concerns, stating that upgrading their security measures would be too costly and time-consuming.

- i. Should you report the company's practices to a regulatory authority, even if it risks your job or consulting contract? (05 Marks)
- ii. Discuss the ethical considerations, including professional responsibility, whistleblowing, and potential harm to users. (05 Marks)
- i. Discuss the legal considerations, including professional responsibility, whistleblowing, and potential harm to users. (05 Marks)

### Question 2:

#### **Question #6: Conflicts of Interest in IT Consulting (15 Marks)**

You are a freelance software developer working with two competing startups in the same industry. While developing a product for one client, you gain access to proprietary algorithms that give them a competitive edge. The other client offers you a higher-paying contract if you incorporate similar algorithms into their product.

- i. How should you handle this situation? (05 Marks)
- ii. Describe the potential ethical issues involved in working with competing clients. (05 Marks)
- iii. Describe the potential legal issues involved in working with competing clients. (05 Marks)

### Question 3:

**Question #7: Manipulating Data in Scientific Research (15 Marks)**

You are a data scientist working on a clinical trial analysis for a new drug. The initial results do not show significant improvement over existing treatments. Your supervisor suggests tweaking the statistical model to make the results appear more favorable, arguing that this will help secure approval and funding for further research.

- i. What should you do? (05 Marks)
- ii. Discuss the implications of manipulating scientific data in terms of ethical and professional responsibility. (05 Marks)
- iii. Discuss the implications of manipulating scientific data in legal terms. (05 Marks)

**Question 4:****Question #9: Contractual Obligations vs. Public Safety (15 Marks)**

Your team is developing software for a medical device that assists in diagnosing critical conditions. Due to budget constraints, management decides to cut corners on testing, significantly reducing the number of safety and accuracy checks. You worry that insufficient testing could lead to incorrect diagnoses and potential harm to patients. Your manager insists that the project must be delivered on time, regardless of the risks.

- i. What are your ethical obligations? (05 Marks)
- ii. What are your legal obligations? (05 Marks)
- i. What actions should you consider taking? (05 Marks)

**Question 5:****Question #3: Security Vulnerabilities and Responsible Disclosure (15 Marks)**

You are a cybersecurity analyst conducting a security audit for a company. During your assessment, you discover that the company's customer database is not encrypted, making it vulnerable to data breaches. When you report this to your supervisor, they dismiss your concerns, saying that encrypting the database would be too costly and time-consuming. They instruct you to finalize the audit without mentioning the issue in your report.

- i. What should you do? (05 Marks)
- ii. Explain your response with reference to potential consequences. (05 Marks)
- iii. Explain your response with reference to professional responsibilities and ethical considerations. (05 Marks)

**Question 6:****Question #8: Employee Monitoring and Privacy (15 Marks)**

Your company plans to introduce an AI-powered surveillance system that tracks employees' movements, screen activity, and conversations in the workplace to enhance security and efficiency. Many employees are unaware of the full extent of the monitoring, and management argues that it is necessary for productivity.

- i. What ethical considerations should you evaluate before implementing the system? (05 Marks)
- ii. What legal considerations should you evaluate before implementing the system? (05 Marks)
- iii. How would you address employee privacy concerns? (05 Marks)