A **Reg. No. :** | | | | | | | | | | | | |

Question Paper Code: R8H82

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2025

One Credit Course

CSE(CYBER SECURITY)

R21USY862 – AI FOR CYBER SECURITY

(Regulations R2021)

Duration: 1.30 Hours Maximum: 50 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Phishing attacks typically target_____. CO1-U

(a) Hardware (b) Emails (c) Firewalls (d) Routers

2. DDoS stands for _____. CO1-U

(a) Direct Denial of Service (b) Distributed Denial of Service

(c) Domain Denial of Service (d) Data Denial of Service

3. Which of the following is not a cyber threat? CO1-U

(a) Malware (b) Encryption (c) Phishing (d) DDoS

4. Which of the following is a supervised learning algorithm? CO1-U

(a) Decision Trees (b) K-Means (c) PCA (d) Clustering

5. Which AI technique is commonly used for analyzing logs and alerts? CO1-U

(a) NLP (b) Image recognition (c) Clustering (d) None of the above

6. Sentiment analysis in threat intelligence can help in _____. CO1-U

(a) Understanding attacker intent (b) Encrypting data

(c) Designing hardware (d) None of the above

7. Which algorithm is most suitable for anomaly detection? CO1-U

(a) Clustering (b) Regression (c) Classification (d) None of the above

8. Incident response using AI is primarily _____. CO1-U

(a) Manual (b) Automated (c) Randomized (d) None of the above

9. Future trend in AI and cyber security is _____. CO1-U

(a) Adversarial AI (b) Automation

(c) Advanced anomaly detection (d) All of the above

10. Machine learning models require _____. CO1-U

(a) Data collection (b) Data preprocessing

(c) Training and validation (d) All of the above

PART – B (2 x 20= 40 Marks)

11.	(a)	Examine the ethical and privacy issues involved in applying AI for cyber security with suitable examples.	CO2-App	(20)
	(b)	Describe the importance of regulatory frameworks and compliance in cyber security with reference to AI applications.	CO2-App	(20)
12.	(a)	Explain the process of building AI models for cyber security including data collection, preprocessing, training, and validation.	CO1-U	(20)
	(b)	Discuss real-world applications and successful implementations of AI in cyber security.	CO1-U	(20)