UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2022

Course: **Introduction to Cyber Security** **Semester: III**
Program: BCA **Time : 03 hrs.**
Course Code: CSSF-2010 **Max. Marks: 100**

Instructions:

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	What is the Impact of a Security Breach. Explain with example.	4	CO1
Q 2	Elaborate the concept of network sniffing?	4	CO1
Q 3	Explain Motivation behind cyber attack.	4	CO1
Q 4	Specify the components of secret key cryptography.	4	CO2
Q 5	List the draw back of Cyber laws	4	CO3

SECTION B
(4Qx10M= 40 Marks)

Q 6	Classify cyber-attack based upon purpose. Use proper diagram with example.	10	CO1
Q 7	What do you understand by Black Hat Hackers, White Hat Hackers and Grey Hat Hackers?	10	CO1
Q 8	List and explain the Applications of Cryptography.	10	C02
Q 9	Elaborate the need of ITA-2K amendments in **2008.** List the major amendments in Information Technology Act 2008.	10	C03

SECTION-C (2Qx20M=40 Marks)

Q 10	Explain usability of following term Cryptology, Encipher, Decipher, Cryptanalysis. Apply these in framework for secure end to end communication.	20	CO2
Q 11	Justify the statement " *Vulnerability lead to attacker to enter the system by bypassing user authentication.*" Classify vulnerability into the multiple categories explain with example. Or Listed and elaborate some of the impacts of vulnerabilities in networks and systems. Elaborate the role of Intrusion Detection Systems and Intrusion Prevention Systems.	20	CO1