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Course: COMP 404 – COMPUTER SYSTEM SECURITY

Assignment 1

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COMP 404 – COMPUTER SECURITY

1. Identify and rate a risk and use the risk determination matrix.

Ans:

Risk management is the process of identifying, assessing, and prioritizing risks to information systems and data, and then implementing measures to minimize, monitor, and control the probability or impact of those risks. Risk determination (risk assessment or risk analysis) is the step within the broader risk management process where you evaluate and quantify the potential risks to an organization's information systems and data. It involves analyzing threats, vulnerabilities, and their potential impacts to determine the level of risk

Impact →	1 (Low)	2	3 (Med)	4 (High)	5 (Crit)
5 (High)	Low	Med	High	Extreme	Extreme
4	Low	Med	High	High	Extreme
3 (Med)	Low	Med	Med	High	High
2	Low	Low	Med	Med	High
1 (Low)	Low	Low	Low	Med	Med

This analysis highlights the importance of proactive risk management in IT infrastructure. By quantifying risks using structured frameworks like NIST SP 800-30, organizations can allocate resources effectively, ensuring resilience against critical failures. Regular audits, continuous monitoring, and periodic reassessments further strengthen an organization's ability to mitigate evolving threats.