UNIVERSITY OF Baguio
SCHOOL OF INFORMATION AND TECHNOLOGY

NAME: Bartolome, Brylle Caccam, Jesus Allyson	DATE PERFORMED: Nov 28, 2024	24/30
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SYSADM1 – Capacity Management & Planning

Part 1. A Simulated Dataset for Capacity Planning Exercise

Scenario: A mid-sized e-commerce website is expecting a significant surge in traffic due to an upcoming holiday sale.

Date	Time	CPU Utilization (%)	Memory Utilization (%)	Network In (Mbps)	Network Out (Mbps)	Response Time (ms)
2023-11-20	09:00 AM	25	50	100	50	200
2023-11-20	12:00 PM	40	60	150	75	250
2023-11-20	03:00 PM	60	70	200	100	300
2023-11-20	06:00 PM	35	55	125	60	225

Projected Traffic Increase

- **Expected Peak Traffic:** 5x the normal peak traffic
- **Peak Time:** 12:00 PM – 3:00 PM on the sale day

System Specifications

- **Server Count:** 5
- **CPU Cores per Server:** 8
- **RAM per Server:** 32GB
- **Network Bandwidth per Server:** 1Gbps

Additional Considerations

- **New Product Launch:** A highly anticipated product will be released during the sale.