Part II – IP Addressing Plan and Subnetting Configuration

This section outlines the detailed IP addressing and subnetting configuration for the hybrid network.   
The addressing scheme ensures efficient utilization of IP resources across multiple VLANs and subnets.

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| VLAN | IPv4 Subnet | IPv6 Subnet |
| 10 (Faculty) | 192.168.1.0/27 | 2001:DB8:3C4D::1/64 |
| 20 (Students) | 192.168.1.32/27 | 2001:DB8:3C4D::2/64 |
| 30 (Guest) | 192.168.1.64/27 | 2001:DB8:3C4D::3/64 |
| 50 (Staff) | 192.168.1.96/27 | 2001:DB8:3C4D::4/64 |
| 99 (Management) | 192.168.1.128/27 | 2001:DB8:3C4D::5/64 |