SPCI102 Exam Study Guide

Must-Study Questions by Year

- OSI vs TCP/IP Model (Every Year: 20202023)
- Subnetting (Class C/B, with calculation problems): 2020, 2022, 2023
- IPv4 vs IPv6 headers: 2021, 2023
- VLANs and VTP: 2021, 2023
- CIDR and VLSM: 2020, 2021, 2023
- NAT, PAT: 2020, 2021, 2023

Important

OSI vs TCP/IP (Functions, Layers, Diagrams)

Subnetting (Class B, C, VLSM, CIDR)

Routing Protocols (RIP, OSPF, EIGRP, NAT)

VLAN & VTP (Trunking, Domains)

IPv4/IPv6 Headers, MAC

2-Mark (Repeated Questions)

- What is NAT?
- What is CIDR?
- Explain three-way handshake- What is VTP?
- What are DTE and DCE?- What is subnetting?

10-Mark Topics

- OSI vs TCP/IP model with diagram
- Subnetting large networks (Class B)
- VLANs and advantages
- Frame Relay, MPLS, Edge Routers

Tips

- Draw OSI model daily with functions
- Practice subnetting problems on paper
- Revise IPv4/IPv6 header fields (Length, TTL, Checksum)