Final Written Assessment Revision List

UG total marks: 90
PG total marks: 100
9 multipart questions

Q1. Data Link Layer

UG: 7-9 marks | PG: 9-11 marks

4 -5 short answer question (concepts)

Content:

- Lecture 2a - Data Link Layer
- Lecture 2b - Ethernet

Q2. Network Layer

UG: 10-12 marks | PG: 11-13 marks

6-7 short answer question (concepts and calculations)

Content:

- Lecture 4a - Network Layer
- Lecture 4b - IPv4
- Lecture 10a - IPv6 Introduction
- Lecture 10b - IPv6 Address Type
- IP fragmentation Discussion in Canvas
- IPv6 Discussion and IPv6 Demo in Canvas
  - Abbreviation/Expansion
  - Subnet/Site/ISP/Registry prefix

Q3. VLSM

UG: 15-17 marks | PG: 15-17 marks

1 Scenario-based question (multipart)

Content:

- Lecture 5a - IPv4 Subnetting
- Lecture 5b - IPv4 Subnetting Questions
- Lecture 5c - How To Subnet
- Lecture 6a - IPv4 Subnetting - VLSM
- VLSM Discussion and VLSM Demo in Canvas
  - Calculate Subnet/Broadcast Address
  - Calculate Subnet usable range
  - Calculate Subnet Mask (either notation)
  - Calculate unused range
  - From a given IP/mask, calculate subnet info

Q4. Transport Layer

UG: 10-12 marks | PG: 11-13 marks

1 Scenario-based question (multipart)
1-2 short answer questions (concepts)

Content:

- Lecture 11a - Transport Layer
- Lecture 11b - Transport Layer - UDP
- Lectures 12a - Transport Layer - TCP
- Lectures 12b - TCP Flow Control
- TCP Discussion and TCP Demo in Canvas:
  - 3-way handshake
  - Congestion window

Q5. Generic Networking

UG: 8-10 marks | PG: 10-12 marks

1 Scenario-based question (multipart)
1-2 short answer questions (concepts)

Content:

- Lecture 01b - Networking Protocols
- Lecture 4c - ARP
- Lecture 6b - Routing Between Networks
- Lecture 7a - Inter-VLAN Routing
- Intra-VLAN/Inter-VLAN and ARP Discussion and Inter-VLAN Comms Demo in Canvas:
  - How many ARP requests?
  - Contents of ARP request
  - Indicate Src/Dst MAC/IP
  - Indicate the MAC address table content
  - Identify the Encapsulation protocol

Q6. Spanning Tree Protocol

UG: 8-10 marks | PG: 11-13 marks

1 scenario based question (multipart)
1-2 short answer questions (concepts)

Content:

- Lecture 8a - Layer 2 Redundancy
- Lecture 8b - Spanning Tree Protocol
- Lecture 8c - Spanning Tree Protocol - Advanced
- STP Discussion and STP Demo in Canvas

Q7. LAN design and Link Aggregation

UG: 5-7 marks | PG: 5-7 marks

3-4 short answer questions (concepts)

Content:

- Lecture 7b - LAN Design
- Lecture 9a - Link Aggregation

Q8. Ethernet Switching and VLANs

UG: 13-15 marks | PG: 13-15 marks

1 Scenario-based question (multipart)
3-4 short answer questions (concepts)

Content:

- Lecture 2c - Ethernet Switching
- Lecture 3a - VLANs
- Lecture 3b - Switch Configuration - Best Practices
- Lecture 7a - Inter-VLAN routing
- Routing-on-a-Stick Demo In Canvas

Q9. Wireless Networks

UG: 5-7 marks | PG: 6-8 marks

3-4 short answer questions (concepts)
OR
1 Scenario based question (multipart)
1-2 short answer questions (concepts)

Content:

- Lecture 9b - Wireless Concepts
- Lecture 9c - Wireless Networks
- Lecture 9d - Wireless Security