Group Project Rubric

[IT6003] - Networks and Data Communications (Networking 1)
2023-2024 – SEM B

Task1a: IPv4 addressing	No IPv4 subnetting **0**	IPv4 subnetting using VLSM is completed with some errors. **1**	IPv4 subnetting using VLSM with subnet mask are completed with some errors. **2**	IPv4 subnetting using VLSM with subnet mask and IP address range with first and last addresses are completed with few errors. **3**	IPv4 subnetting using VLSM with subnet mask, IP address range with first and last, and proper subnet for serial interfaces addresses are completed with no errors. **4**
Task1b: IPv6 addressing	No IPv6 subnetting **0**	IPv6 subnetting is completed with some errors. **1**	IPv6 subnetting with Prefix is completed with some errors. **2**	IPv6 subnetting with Prefix, and IP address range with first and last IPs. are completed with few errors. **3**	IPv6 subnetting with Prefix, IP address range with first and last IPs, and IPv6 for serial links are completed with no errors. **4**
Task2: Application Layer services	No Explanation **0**	One of the application layer services is explained with some errors. **0.5**	Two of the application layer services are explained with some errors. **1**	Three of the application layer services are explained with a few errors. **1.5**	All (Four) application layer services are explained with no errors. **2**
Task3: Network devices.	No devices listed. **0**	One device is listed. **0.25**	Two devices are listed. **0.5**	Two devices are listed and the functions of one device is explained with no errors or the functions of two devices are explained with some errors. **0.75**	Two devices are listed, the functions are explained and at least 2 pieces of information about the operation for each device are explained with no errors. **1**

Task4: LAN Protocol.	The protocol is not identified. **0**	The LAN Protocol is identified. **0.5**	The LAN Protocols is explained with some errors. **1**	The LAN Protocol is explained with no errors. **1.5**	The LAN Protocol is explained with no error, and the operation of the two main access methods used for LAN and WLAN are explained **2**
Task5: Transmission media	No transmission media listed. **0**	One type of transmission media is listed. **0.5**	At least two transmission media are listed. **1**	At least two transmission media are listed and one of them explained with no errors. **1.5**	At least two transmission media are listed, both explained with 2 relevant facts about each media type. with no errors. **2**
Task6: Data flow through OSI layers.	No devices identified. **0**	Few of network devices used for the data flow are identified, few of related inbound and outbound interfaces are identified, and the flow is partially simulated in PT. **2.5**	Some of network devices used for the data flow are identified, some of related inbound and outbound interfaces are identified, some protocols at some layers are identified, some (physical port number, IP addresses, and MAC addresses) are identified, and the flow is partially simulated in PT. **5**	Most of Network devices used for the data flow are identified, all related inbound and outbound interfaces are identified, all protocols at each layer are identified and described, All (physical port number, IP addresses, and MAC addresses) are identified, and the flow is fully simulated in PT. **7.5**	All Network devices used for the data flow are identified, all related inbound and outbound interfaces are identified, all protocols at each layer are identified and described, All (physical port number, IP addresses, and MAC addresses) are identified, and the flow is fully simulated in PT and described step-by-step. **10**

Task7: Routing Protocol.	No routing protocol selected. **0**	Dynamic routing protocol is selected for IPv4 or IPv6 **0.5**	Dynamic routing protocol is selected for both IPv4 and IPv6 **1**	Dynamic routing protocol is selected for both IPv4 and IPv6. Reason given for choosing routing protocol either for IPv4 or IPv6 **1.5**	Dynamic routing protocol is selected for both IPv4 and IPv6. Reason given for choosing routing protocol for both for IPv4 and IPv6 **2**
Task8: Implementing the network.	No network topology is connected in PT **0**	The network topology is connected in PT but no configuration. **3**	The network topology is fully implemented (with configuration) in PT but No ping due to few errors. **6**	The network topology is fully implemented in PT. some devices can ping other devices. **10**	The network topology is fully implemented in PT. Pinging occur between all devices. Redundancy is implemented **15**
Task9: Implementing 2 Application Layers services.	No services implemented. **0**	One service implemented either for IPv4 or IPv6 with few errors. **2**	Two services implemented either for IPv4 or IPv6 with no errors. **4**	Two services implemented for both IPv4 and IPv6 with few errors. **6**	Two services implemented for both IPv4 and IPv6 with no errors. **8**