

# TRAINING CONTENTS

Session	Name of the Topics	Contact Hour
Session 01	Module 1 – Computer Networks <ul style="list-style-type: none"><li>• Introduction</li><li>• Types of Computer Networks</li></ul>	3
Session 02	Module 1 – Computer Networks <ul style="list-style-type: none"><li>• Goals of Computer Networks</li><li>• Network Topology</li></ul>	3
Session 3	Module 2 – Computer Network Architecture <ul style="list-style-type: none"><li>• Protocols</li><li>• The TCP/IP Protocol Suite</li></ul>	3
Session 4	Module 2 – Computer Network Architecture <ul style="list-style-type: none"><li>• The OSI Model</li><li>• Service Primitives and Parameters</li></ul>	3
Session 5	Module 2 – Computer Network Architecture <ul style="list-style-type: none"><li>• Layers of the OSI Model</li></ul>	3

Session 6	Module 4 – Data Transmission Fundamentals <ul style="list-style-type: none"> <li>• Basic Concepts</li> <li>• Frequency-Domain Consideration of Signals and Transmission</li> </ul>	3
Session 7	Module 5 – Data Transmission Fundamentals <ul style="list-style-type: none"> <li>• Metallic Transmission Media</li> <li>• Optical Fiber</li> </ul>	3
Session 8	Module 5 – Data Transmission Fundamentals <ul style="list-style-type: none"> <li>• Unguided Transmission Techniques</li> </ul>	3
Session 9	Module 5 – Data Transmission Fundamentals <ul style="list-style-type: none"> <li>• Unguided Transmission Techniques (continued)</li> </ul>	3
Session 10	Module 5 – Data Transmission Fundamentals <ul style="list-style-type: none"> <li>• Transmission Systems</li> </ul>	3
Session 11	Review Session <ul style="list-style-type: none"> <li>• Based on the contents of Training Session 01 to 10</li> </ul>	3
Session 12	Module 6 – Data Encoding <ul style="list-style-type: none"> <li>• Digital Data into Digital Signals</li> <li>• Digital Data into Analog Signals</li> </ul>	3
Session 13	Module 7 – Digital Data Communications Techniques <ul style="list-style-type: none"> <li>• Voice-Band Transmission System</li> <li>• Broadband Transmission System</li> </ul>	3

Session 14	Module 7 – Digital Data Communications Techniques <ul style="list-style-type: none"> <li>• Error Detection Techniques</li> <li>• Transmission Line Interfaces</li> </ul>	3
Session 15	Module 8 – Multiplexing <ul style="list-style-type: none"> <li>• Frequency Division Multiplexing</li> <li>• Time Division Multiplexing</li> </ul>	3
Session 16	Module 9 – Switched Data Communication <ul style="list-style-type: none"> <li>• Circuit Switching</li> <li>• Control Signaling in Circuit-Switched Network</li> </ul>	3
Session 17	Module 9 – Switched Data Communication <ul style="list-style-type: none"> <li>• Packet Switching</li> <li>• Routing in Packet-Switched Network</li> </ul>	3
Session 18	Module 10 – Local Area Networks <ul style="list-style-type: none"> <li>• LAN Technology</li> <li>• Medium Access Control Protocols</li> </ul>	3
Session 19	Module 11 – Practical Works <ul style="list-style-type: none"> <li>• IP Configuration</li> </ul>	3
Session 20	Mentorship Session:  A dedicated session with an industry expert to discuss career opportunities, real-world applications of Basic Networking, and insights into the latest trends.	3

	Total Class Hours	60 hours
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