

Preparation Guide for BJ 89

BJ 89: Install, Manage and Support basic Networking Equipment and Provide Troubleshoot Solution to Interconnectivity Problems		
Element	How Will You Be Evaluated?	How To Prepare Yourself?
BJ89-1: Match the appropriate port settings for a protocol used by a computer for data transmission	<p>The candidate will be asked to match ports with their description and transport method.</p> <p>Allowed material : Open book</p> <p>Format: Oral evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 1. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 4 Introduction to TCP/IP Protocols and Chapter 10 In-Depth TCP/IP Networking</p>
BJ 89-2: Install, configure and troubleshoot IP addressing schemes to ensure proper communication between network devices	<p>'Hands-on' exercises evaluated by Content Specialist</p> <p>Allowed material : Open book</p> <p>Format: Laboratory exercises and written evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 2. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 4 Introduction to TCP/IP Protocols; Chapter 6 Network Hardware; Chapter 10 In-Depth TCP/IP Networking; Chapter 13 Troubleshooting Network Problems</p>
BJ 89-3: Understand and use common networking terminology used by industry professionals	<p>Match equipment with appropriate environment and standard</p> <p>Allowed material : Open book</p> <p>Format: Oral evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 3. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 1 An Introduction to Networking; Chapter 5 Topologies and Ethernet Standards; Chapter 7 WANs and Remote Connectivity; Chapter 8 Wireless Networking; Chapter 11 Voice and Video Over IP</p>
BJ 89-4: Secure a SOHO (Small-Office-Home-Office) router and ensure that the	<p>Match SOHO components with elements necessary to ensure proper</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 4. Please use the hyperlinks.</p>

<p>proper encryption scheme is selected for your computer and router to communicate</p>	<p>security of the links and data</p> <p>Allowed material : None</p> <p>Format: Written evaluation</p>	<p>Network+ Guide to Networks (Tamara Dean) 5th edition; Chapter 6 Network Hardware; Chapter 8 Wireless Networking; Chapter 12 Network Security</p>
<p>BJ 89-5: Properly make, test, audit and use network cables (ex: patch) to ensure efficient communication between computers</p>	<p>Candidates will be auditing cables and repairing a UTP patch cable</p> <p>Allowed material : Open book</p> <p>Format: Laboratory exercise and written evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 5. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 3 Transmission Basics and Networking Media</p>
<p>BJ 89-6: Understand logical and physical network topologies and their characteristics (i.e. peer-to-peer, client-server)</p>	<p>Identify topologies from diagrams and list advantages and disadvantages of different network environments</p> <p>Allowed material : Open book</p> <p>Format: Oral evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 6. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 1 An Introduction to Networking; Chapter 5 Topologies and Ethernet Standards and Chapter 9 Network Operating Systems</p>
<p>BJ 89-7: Configure and troubleshoot connections between local and remote computers</p>	<p>Using the command line interface, test connectivity with well-known commands and list the steps to troubleshoot remote access problems</p> <p>Allowed material : Open book</p> <p>Format: Oral evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 7. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 7 WANs and Remote Connectivity and Chapter 12 Network Security</p>
<p>BJ 89-8: Identify,</p>	<p>Using a scenario,</p>	<p>Refer to competency elements and supplementary</p>

<p>install and perform basic configurations of common network devices, such as hubs, switches and routers</p>	<p>design a simple LAN network. Use the proper icons, identify broadcast and collision domains and list the functions of each interconnecting device</p> <p>Allowed material : None</p> <p>Format: Draw the topology and written evaluation</p>	<p>study materials in Section B, Element 8. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 5 Topologies and Ethernet Standards; Chapter 6 Network Hardware; Chapter 8 Wireless Networking</p>
<p>BJ 89-9: Understand the OSI model and use it to troubleshoot communication pathways</p>	<p>Using a template, identify the layers and their function(s), as well as protocols and equipment within each layer</p> <p>Allowed material : None</p> <p>Format: Written Evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 9. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 2 Networking Standards and the OSI Model</p>
<p>BJ 89-10: Interpret documentation necessary for connectivity</p>	<p>Given a typical LAN problem, list and describe the steps to troubleshoot the problem and keep track of the problem</p> <p>Allowed material : None</p> <p>Format: Written evaluation and description of a troubleshooting flowchart</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 10. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition: Chapter 13 Troubleshooting Network Problems; Chapter 14 Ensure Integrity and Availability; Chapter 15 Network Management</p>
<p>BJ 89-11: Effectively use command line tools to troubleshoot connectivity problems on a network</p>	<p>The candidate must demonstrate how to use command prompt</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 11. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th</p>

	<p>Allowed material : Open book</p> <p>Format: Written evaluation and laboratory exercises</p>	<p>edition; Chapter 9 Network Operating Systems Chapter 10 In-Depth TCP/IP Networking</p>
<p>BJ 89-12: Put into practice proper security measures</p>	<p>Using a diagram, identify the area and equipment of a network that should be protected and external threats</p> <p>Allowed material : None</p> <p>Format: Written evaluation</p>	<p>Refer to competency elements and supplementary study materials in Section B, Element 12. Please use the hyperlinks.</p> <p>Network+ Guide to Networks (Tamara Dean) 5th edition; Chapter 8 Wireless Networking Chapter 12 Network Security; Chapter 14 Ensure Integrity and Availability</p>