

CIS 150 Network Technology
Study Guide
COMMUNITY COLLEGE OF PHILADELPHIA
Business and Technology Division

Course Foundations = Successful completion of this course provides some of the foundation in preparation for Comptia Net+ and Cisco CCT Certification examinations. Specific exams and objectives that will be evaluated in this course are identified by the terms and phrases included in this document:

Project Overview and Requirements = After lectures and discussions, students will participate in group project activities. Prior to projects, limited “Hands-On” activities will be performed by students with the assistance of the professor. Group participation will be required to complete a number of activities required in class. Students refusing to work with projects groups will receive a score of “0%” as a project grade.

Required book for class = “**Foundations of Network Technology**” by Robert Spencer ISBN-13: 978-1545231548. All but a few items on the study guide are discussed in the textbook. The items which do not appear in the textbook will be experienced thru projects, lecture and student individual research.

Examination Overview and Requirements = Students should expect at least two projects and two examinations. Question type may range from True-False, Matching and Multiple Choice.

Selected Terms, Phrases and Tasks = The following terms, commands, phrases, etc. will be included in CIS 150. **ANY** and **ALL** of the terms **MAY BE ON ANY EXAMINATIONS in this** class. It is recommended that students use the terms below to prepare for lecture, projects and examinations. Please conceptualize the items listed below using the following perspectives:

- “What is it?”
- “What does it look like?”
- “What does it do?”
- “What way can it be used?”

(Exam #1 Items)

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|-------------------|---------------------|--------------------|
| 1. Certifications | 13. Ifconfig | 26. MAC address |
| 2. Virtual Box | 14. Subnet Mask | 27. Shared Folder |
| 3. VMWare | 15. Default-Gateway | 28. Network drive |
| 4. Server | 16. DHCP | 29. Shared Printer |
| 5. Client | 17. Apipa | 30. Net share |
| 6. Ipconfig | 18. Protocol | 31. Net use |
| 7. IP address | 19. Ping-t | 32. UNC |
| 8. TCP/IP | 20. Pathping | 33. Browser |
| 9. IPv4 / IPv6 | 21. ICMP | 34. WebUI |
| 10. CIDR / VLSM | 22. Ctrl+c | 35. DNS |
| 11. Octet | 23. Tracert | 36. FQDN |
| 12. Netsh | 24. Route Print | 37. URL |
| | 25. Hostname | 38. HTTP |

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|-------------------------|-------------------------------|-------------------------|
| 39. HTTPS | 85. 100BaseTx | 129. 802.11's |
| 40. netstat -a | 86. Logical Topology | 130. Wireless |
| 41. FTP | 87. Physical Topology | 131. Cell/Token |
| 42. Directory Structure | 88. Ring | 132. Packet |
| 43. Dir | 89. MAU | 133. Ethernet Frame |
| 44. CIs | 90. Bus | 134. Network Utilities |
| 45. Cd | 91. Star | 135. RDP |
| 46. cd\ | 92. Mesh | 136. SSH |
| 47. cd .. | 93. Bridge | 137. SMTP |
| 48. mkdir | 94. Ad-Hoc | 138. POP |
| 49. rmdir | 95. Infrastructure | 139. TFTP |
| 50. Mget | 96. WLAN | 140. Cleartext |
| 51. Mput | 97. SSID | 141. Virus |
| 52. Firewall | 98. LAN | 142. Trojan |
| 53. Authentication | 99. MAN | 143. Hijackware |
| 54. Encryption | 100. WAN | 144. Hackers |
| 55. PKI | 101. Decimal | 145. Crackers |
| 56. Public Key | 102. Binary | 146. DoS |
| 57. Private Key | 103. Hexadecimal | 147. Spoofing |
| 58. NIC | 104. Number Conversions | 148. Brute Force |
| 59. Coax | 105. IP Classes | 149. Dictionary Attack |
| 60. Thicknet | 106. arp -a | 150. Baiting |
| 61. Thinnet | 107. Nbtstat -a w.x.y.z | 151. Phishing |
| 62. BNC | 108. Software Ports | 152. Social Engineering |
| 63. Cat Cable | 109. Netstat -a | 153. RFI vs. EMI |
| 64. STP | 110. Protocols | 154. Baseline |
| 65. UTP | 111. Terminal Emulators | 155. IDS |
| 66. Plenum | 112. Interface/Port | 156. IPS |
| 67. Twisted-Pair | 113. VLAN | 157. VPN |
| 68. Straight | 114. Switchport Access Vlan # | |
| 69. Crossed | 115. Trunk | |
| 70. Rolled | 116. Sh Run | |
| 71. Console | 117. Sh Ip Int Brief | |
| 72. Fiber | 118. Sh run | |
| 73. RJ-45 | 119. Mac Address-Table | |
| 74. RJ-11 | 120. Enable | |
| 75. 568A and B | 121. Telnet | |
| 76. Hub | | |
| 77. Switch | | |
| 78. Router | | |
| 79. Bandwidth | | |
| 80. Baseband | | |
| 81. Broadband | | |
| 82. 10Base2 | | |
| 83. 10Base5 | | |
| 84. 100BaseT | | |
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| | (Exam #2 Items) | |
| | 122. DNS | |
| | 123. DMZ | |
| | 124. Proxy | |
| | 125. Demarc | |
| | 126. ISO | |
| | 127. RFC | |
| | 128. OSI Model | |