

**SYSTEMS SPECIALIST
TECHNICIAN
KNOWLEDGE TEST
(SST-KT)**

STUDY GUIDE

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OVERVIEW

This Study Guide is designed to familiarize you with the knowledge and skills required by AT&T's Systems Specialist Technician position and covered by the Systems Specialist Technician Knowledge Test. It will also familiarize you with the test, help you decide if you're ready to take it, and guide your preparation if you're not ready at this time.

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PART 1: TEST DESCRIPTION

What is the purpose of the Systems Specialist Technician Knowledge Test?

To measure your knowledge, skills, and abilities to apply concepts, terms, and principles associated with the Systems Specialist Technician position. Although the test contains some factual questions, it emphasizes your understanding of the subject and your ability to apply what you know, not just your memory for facts or formulas.

Who has to take it?

Candidates for the Systems Specialist Technician are required to qualify on this test. Although there are no prerequisites for taking the Systems Specialist Technician Test, if you have no prior training or work experience in dealing with networking, diagnostics, troubleshooting, and windows interfacing, you probably will not do well on the test.

What kind of test is it?

It is a 57 question-multiple choice test. Each question has at least 4 possible answers to choose from. Some questions refer to figures, which will be provided.

How is my score determined?

Your score will be the number of questions you answer correctly. There's no penalty for guessing, so try to answer every question.

What happens if I don't pass?

If you take the test but do not score high enough to qualify, you will have to wait for a specified period, determined by AT&T, before taking the test again.

What does the Systems Specialist Technician Knowledge Test cover?

The questions cover 14 areas that are important to the job:

- Media Connectors
- Media Types
- Network Components
- OSI Model
- Classful IP Ranges
- Sub netting
- IP Addressing Methods
- TCP/IP Protocols
- DNS and SNMP Protocols
- Workstation Networking
- Network Diagnostic Utilities
- Diagnostic Utility Output
- Troubleshooting
- Windows OS Interfaces

What *exactly* do I have to know?

Here is a list of the specific knowledge and skills the test covers. If you know and understand these things and can apply what you know, you should do well on the test.

1. Media Connectors

Recognize and describe the uses of the following media connectors: RJ-11 (Registered Jack), RJ-45 (Registered Jack), and USB (Universal Serial Bus)

2. Media Types

Recognize the following media types and describe their uses: Category 3, 5, 5e, and 6; UTP (unshielded twisted pair)

3. Network Components

Identify purposes, features and functions of the following network components: hubs, switches, bridges, routers, gateways, NICs (network interface cards), modems, and firewalls

4. OSI Model

Knowledge of what the OSI model is; be able to name the seven layers in the right sequence

5. Classful IP Ranges

Identify classful IP (Internet Protocol) ranges for Class A, B, and C and their subnet masks

6. Sub netting

Identify the purpose of sub netting

7. IP Addressing Methods

Identify and differentiate among the following IP (Internet Protocol) addressing methods: static, dynamic, self-assigned (APIPA/Automatic Private Internet Protocol Addressing)

8. TCP/IP Protocols

Define the function and uses of the following protocols used in the TCP/IP suite and how to configure connectivity to the Internet: TCP (Transmission Control Protocol), UDP (User Datagram Protocol), FTP (File Transfer Protocol), SMTP (Simple Mail Transfer Protocol), HTTP (Hypertext Transfer Protocol), HTTPS (Hypertext Transfer Protocol Secure), POP3/IMAP4, Telnet, SSH (Secure Shell), ICMP (Internet Control Message Protocol), ARP/RARP (Address Resolution Protocol/Reverse Address Resolution Protocol)

9. DNS and SNMP Protocols

Identify the purpose of network services and protocols DNS (Domain Name Service) and SNMP (Simple Network Management Protocol)

10. Workstation Networking

Identify the basic capabilities (including media, network protocols, and peer-to-peer server services) needed for client workstations to connect to and use network resources

11. Network Diagnostic Utilities

Ability to use the appropriate network diagnostic utility given a troubleshooting scenario: Tracert/traceroute, Ping, Arp, Netstat, Nbtstat, Ipconfig/ifconfig, Nslookup

12. Diagnostic Utility Output

Given output from one of the network diagnostic utilities listed above, identify the utility and interpret the output

13. Troubleshooting

Given a network problem scenario, select an appropriate course of action based on a logical troubleshooting strategy which can include: identifying the symptoms and potential causes, identifying the affected area, establishing what has changed, selecting

14. Windows OS Interfaces

Ability to navigate/use the major Windows OS (operating system) interfaces (Windows Explorer, My Computer, Control Panel, computer Management Console, Accessories/System Tools, Command line, Network Neighborhood/My Network Places, Task Bar/systray, Start Menu, Device Menu) and be familiar with their functions

TEST PREPARATION

Tips for Studying on Your Own

If you have some experience in this field or have already taken a course, perhaps some time ago, you should plan a study strategy.

1. Identify Your Weak Areas

- Read through all the knowledge and skill areas listed on pages 4 – 5.
- Mark the areas in which you have no training or work experience and the ones related to the practice questions you missed or didn't understand.

2. Find a Textbook or Website

- Look for books and websites that cover the subjects you need.
- Books and websites that have practice problems and exercises to let you check your understanding are the best.

3. Study

- Identify the sections you need to study.
- Concentrate on one section at a time.
- Work the problems and do the exercises.
- If you have trouble with a topic, read the material again. If you still have trouble, find another source of information. A new explanation often helps.

4. Check Your Progress

- Answer the review questions contained in your book or on a website.