



# TECHNICAL KNOWLEDGE TEST II TEST GUIDE

## WHY DO AT&T AND ITS AFFILIATES TEST?

At AT&T, we pride ourselves on matching the best jobs with the best people. To do this, we need to better understand your skills and abilities to make sure that you are indeed the right match for the job. Our ultimate goal is to set you up for success in your career at AT&T (that is, if AT&T is the right match for you). Research has shown that tests provide accurate measures of people’s skills and abilities and, therefore, we use tests to identify people who are the best match for the job. Our philosophy is simple...if you succeed in your role, then we succeed as a company.

## WHAT IS THE TECHNICAL KNOWLEDGE TEST II (TKT II)?

The TKT II is designed to measure an individual's knowledge of technical concepts required to perform certain technical jobs in AT&T. Study materials are not provided. The job-related knowledge assessed must be acquired prior to testing.

The technical concepts fall into the following five categories:

- ❖ Basic Electricity
- ❖ Basic Computer Knowledge
- ❖ Digital Communication and Transmission
- ❖ Read and Interpret Technical Information
- ❖ Basic Math

These concepts are generic; that is, they apply to all fields that use them and not only to the telecommunications industry. The following technical concepts are covered in the test:

Alternating Current (AC) and Direct Current (DC)	Signal Noise and Distortion
Basic Electrical Circuits, including open/closed, shorts, grounds, wiring, etc.	Potential Differences, Batteries, Float Voltage, Grounding, and Conductance
Basic Electrical Transmission and Waveforms	Electrical Safety Practices
Electrical Conductors	Basic and Intermediate Computer Functions, including using: Start Menu, Task Bar, Accessories/System Tools, My Computer, Control Panel, Device Manager, Network Neighborhood/My Network Places, windows, saving files, etc.
Electrical Flow, Power, Resistance, and Current	Basic Computer Software functions
Electrostatic Discharge	Digital Transmission, including advantages and disadvantages, Digital/Analog Conversion, Bit Frame, Bit Stream, T-carriers – hierarchy, overhead, framing, and data rates
Electrical Fuses	Units of Measurement, including Binary System
Identify and use various electrical units such as Voltage, Current, Resistance, and Power	Read and interpret technical instructions, schematic diagrams, flowcharts, etc.
Impedance	Basic Math (Addition, subtraction, multiplication, and division), positive and negative numbers
Electrical Insulation	



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### WHAT CAN I EXPECT TO SEE ON THE TEST?

The TKT II consists of 100 multiple-choice questions and takes 1 hour and 40 minutes complete.

#### ❖ SAMPLE QUESTIONS

##### **Basic Electricity**

1. What kind of circuit has a complete current path?

- A. Open
- B. Grounded
- C. Closed
- D. Incomplete

The correct answer is C.

2. What is the term used to describe the ability of a device to store energy in the form of an electrical charge?

- A. Inductance
- B. Capacitance
- C. Conductance
- D. Reactance

The correct answer is B.

##### **Computer, Internet and Network Knowledge**

1. Which of the following application is a database application?

- A. Word
- B. Internet Explorer
- C. Access
- D. Mozilla Firefox

The correct answer is C.

2. Which of the following is a program or device designed to protect a network by preventing unauthorized users from gaining access or by monitoring transfers of information to and from the network?

- A. A Firewall
- B. MS Outlook
- C. Antivirus Software Package
- D. Virtual Private Network (VPN)

The correct answer is A.



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### Digital Communication and Transmission

1. What is the term for an electrical signal with only two states?

- A. Analog
- B. Linear
- C. Sine Wave
- D. Digital

The correct answer is D.

2. According to the OSI Reference Model, what is the lowest layer?

- A. Data link
- B. Network
- C. Physical
- D. Application

The correct answer is C.

### Electrical Safety Practices

1. A fuse is a safety device activated when:

- A. the resistance looking into the load is low.
- B. the current through it is too high.
- C. the load goes on an open circuit.
- D. the voltage across it is too high.

The correct answer is B.

2. When it comes to safety around electrical equipment, you should:

- A. Assume that all metal objects are safe to the touch until tested positive.
- B. Never touch electrical equipment.
- C. Follow manufacture directions.
- D. Ask the customer which equipment is turned off, then proceed to work on it.

The correct answer is C.



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### Applied Math

1. The binary sum of 10001 and 1111 is:

- A. 011110
- B. 111111
- C. 111110
- D. 100000\*

The correct answer is D.

2. One piece of equipment produces twice the output of another. If the second piece of equipment produces 200 output units, how many output units does the first produce?

- A. 20
- B. 100
- C. 400
- D. 50

The correct answer is B.

### WHAT CAN I DO TO PREPARE FOR THE TEST?

At AT&T, our goal in testing is not to cause you to fail; rather, our intent is to set our employees up for success. Remember, we succeed when you succeed. The best way for you to succeed on a given test is to adequately prepare. As illustrated, the TKT II requires specific technical knowledge. Acquiring this knowledge through coursework or independent study is the best way to prepare to take the test. Keep in mind, however, that completion of coursework or independent study will not guarantee that you will pass the test. It is important that you have an understanding of the material presented in the course or obtained through independent study.

### HOW WILL THIS TEST BE ADMINISTERED?

A member of our Staffing team will provide you with the time and location for your testing session. Try to arrive at the location at least 15 minutes before your scheduled test time to give yourself time to relax before the test begins. You may want to bring a jacket or a sweater in case the temperature in the testing location is not to your liking. Feel free to ask questions before the test begins, and be sure you understand the format of the TKT II.



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### WHAT CAN I DO TO PERFORM MY BEST ON THE TEST?

- ✓ Read questions carefully.
- ✓ Think - reason out your answer.
- ✓ Answer questions you are sure of first.
- ✓ Reject immediately those answers you know are incorrect.
- ✓ Don't change your answers unless an obvious mistake has been detected.
- ✓ There is no penalty for guessing, so it is in your best interest to answer every question.
- ✓ Be aware of the time (make a mental note of the time when the test begins and pace yourself accordingly).

### RETEST INTERVALS

If you do not qualify on the TKT II, do not be discouraged. Perhaps, this would indicate that this position is really not the best match for you. Who knows – perhaps a better, more closely matched opportunity awaits you. If you feel strongly that this is the right position for you, then you may retest at six-month intervals. However, please note that test standards are periodically updated to reflect current abilities and skills required for our jobs. Therefore, it may be necessary to meet new test standards should they be introduced prior to your placement on the job.

### SUMMARY

When you succeed in your job, AT&T succeeds as a company! Successful completion of the TKT II test qualifies you for possible placement into jobs requiring this test. Additional testing may be required for certain positions. See job briefs in your area for additional testing requirements for titles you are interested in.

**Thank you for your interest in starting (or expanding) your career at AT&T!**

**AT&T and its affiliates support and comply with the provisions of the Americans with Disabilities Act (ADA) and other Federal and State laws that specifically assist individuals with disabilities. If you have a limiting disability and need special testing arrangements, please ask your local Employment Office or Placement Bureau personnel for information about the testing accommodation process.**