



The absolute handbook for understanding aptitude tests



Contents

- 1. Introduction
- 2. Understanding the basics: what are aptitude tests?
- **3.** Types of aptitude tests
- 4. How to prepare for an aptitude test: 10 highly effective tips for applicants
- 5. How employers use aptitude tests: applications of aptitude assessments in hiring
- 6. Advantages and disadvantages of aptitude
- 7. Conclusion

Introduction

Aptitude tests are an excellent way to assess an individual's ability to perform, learn and succeed in the roles or institutions for which he/she is aspiring. Ideal for testing academic potential and career suitability, several forms and combinations of aptitude assessments can be used to analyze mental abilities in multiple areas.

This guide serves as a detailed handbook for aspirants to understand aptitude tests and their applications. Students and professionals alike will find useful practice links and actionable tips to prepare for ability and aptitude tests, irrespective of their specialty and functional industry.



Chapter 1 Understanding the basics: what are aptitude tests?

An aptitude test is an evaluation of a person's cognitive prowess and mental potential. An aptitude test uncovers candidates' mental aptitude relevant to their academic choices, vocational preferences, job profiles and their ability to succeed in them.

What does an aptitude test measure?

Employers and institutes specifically handpick aptitude assessments relevant to a job role or an academic position. Different tests measure different abilities. Therefore, there exist numerous possibilities of exploring options that reveal the traits required in a specific role.

Ability and aptitude tests are a proven method to:

- Measure cognitive abilities.
- Assess employability.
- Gain meaningful insights into a candidate.
- Measure a range of skills such as language comprehension, logical thinking and numerical ability.

The structure of a basic aptitude test

Usually, basic aptitude tests are divided into sections that gauge numerical ability, logical reasoning, verbal comprehension, spatial awareness and cognitive ability. These sections can vary, depending on the qualities sought by an employer or institute. However, the elements common to most versions of ability and aptitude tests are listed below.

Ability and aptitude tests are a proven method to:

- Most of these tests contain multiple-choice questions.
- There can also be mathematical equations and true/false question formats.
- The questions are designed to assess a candidate's ability to process information quickly and devise accurate solutions/answers.
- Candidates are expected to finish every section within a fixed duration.



Aptitude test scores

Generally, there is no minimum score required to clear an aptitude test. It depends on the number of applicants taking the test concurrently and the cutoff set by a company/institute. It is vital to score in the top 20 percent of applicants to get an interview invitation. Moreover, candidates who score in the top 5 percent tend to get a higher preference.

Below are three key points to remember if you want to understand aptitude scoring patterns and their interpretations:

- The number of right answers you give in an aptitude assessment test is compared to a benchmark. Afterward, it is represented as a percentile.
- Examiners compare your score with other applicants to learn your reasoning skill levels or specific abilities.
- Some academic or career aptitude tests could involve negative marking for incorrect answers. In that case, it is a great idea to skip an answer about which you are not confident.



Try the sample aptitude test to gain an understanding of the basic structure.

Connect with an expert

Chapter 2 Types of aptitude tests

The aptitude spectrum is vast and evolving continually. Hence, it is possible to have a dedicated test to gauge almost every professional skill and competency across various levels. You can customize an aptitude exam, create combinations relevant to a specific role, explore new evaluation criteria, and more.

Tests to measure fluid and crystallized intelligence

Research published by the University of Iowa states, "Tests measuring cognitive ability or intelligence predict a number of important real-world outcomes such as academic performance, vocational training performance, and job performance." It happens because of the flexibility offered by these tests. Their effectiveness and credibility are enhanced because of their distinct approach toward measuring the different kinds of intelligence. In other words, two distinct components of human reasoning lay the foundation of basic aptitude assessments:



Fluid intelligence

It's the ability to generate, transform and manipulate different types of novel information in real-time. This component of human reasoning is independent of past learning.

A few examples of tests that measure fluid intelligence:

• Puzzles

- Visual reasoning tests
- Abstract reasoning analyses
 Logical reasoning tests
- Spatial reasoning assessment
 Problem-solving skills analysis

Crystallized intelligence

It's the ability to solve familiar problems that can be preserved or even improved in old age. It involves knowledge and learning acquired via experiences and education.

A few examples of tests that measure crystallized intelligence:

- Reading comprehension analyses
 Numerical reasoning test
- Verbal ability tests
 Data interpretation assessment
- Language proficiency assessments
 Decision-making and judgment test

Differential aptitude tests (DATs)

The American Psychological Association defines DATs as a multi-aptitude battery to predict success rates for mid-school students in academics and work. These tests measure the following, also serving as ideal screening tools for recruiters.



Abstract reasoning

Suitable for recruitment and in development settings, an assessment of abstract reasoning helps identify candidates who are good at strategic thinking, besides gauging their ability to cope under pressure and how well they can pick up new, abstract concepts.



Verbal reasoning

An analysis of verbal reasoning helps understand a candidate's ability to comprehend and rationally examine the given piece of information.



Language usage

A variety of tests can help evaluate a candidate's language proficiency. These include tests for grammar, spelling, vocabulary, speech, aptitude tests for language learning, etc.



Mechanical reasoning

This is essential when hiring for mechanical work. Tests that measure mechanical reasoning focus typically on understanding mechanical principles, assembly, manual dexterity, and perceptual skills.



Spatial relations

Jobs constituting complex setups and spatial elements require professionals who can visualize and manipulate 2-D and 3-D shapes, patterns and designs. Hiring for such jobs becomes more efficient by using spatial reasoning tests.



Numerical ability

Testing the numerical ability helps identify candidates who can work with information in a number-based format to make important business decisions based on analytics that predict commercial success.



Perceptual speed and accuracy

Testing a candidate's perceptual speed and accuracy helps determine how well he/she can focus and quickly process information. It is useful in predicting who is likely to break/follow the rules, adhere to performance parameters, etc.

Vocational aptitude tests v/s multi-aptitude assessments

Just as DATs, several other combinations of assessments can be used to measure various aptitudes. These multiaptitude batteries help analyze an individual's IQ, abilities in multiple spaces, etc. In contrast, vocational aptitude tests assess "abilities, interests, personality traits and other factors deemed essential for success in a particular occupation."

Examples of vocational aptitude tests include:

 Aptitude and technical test for 	 Pre-employment assessment
electronics engineers	for cashiers

- Assessments for blue-collar hiring
- Aptitude assessment for lawyers
- Aptitude analysis for retail personnel

• Aptitude analysis for auditors

Chapter 3: How to prepare for an aptitude test: 10 highly effective tips for applicants

Once you know how aptitude testing works, you can begin working toward scoring well. And the key to it lies in repeated practice sessions. This chapter enlists 10 actionable tips for you to try and free aptitude test links to familiarize you with various question types and problem categories.

Tips for acing a mental ability and aptitude test that measures fluid intelligence

As elaborated in the previous chapter, tests that measure fluid reasoning are designed to assess your ability to process new information. Hence, there is no formula for success to prepare for such tests.

However, you can do the following:

1. Explore strategies to boost your fluid intelligence

Train your working memory: According to the Proceedings of the National Academy of Sciences of the United States of America, it is possible to improve your fluid intelligence by training your working memory. It means incorporating practices in your daily life that are good for your attention span, organizational abilities, ability to retain information, etc. The goal is to learn how to break information into smaller, easy-to-process chunks and developing routines that enable you to stay focused for a longer period. It is better to avoid multi-tasking and create checklists for better productivity in general. In the long run, all the practices mentioned above will help you perform better in fluid intelligence-based aptitude assessments.

Challenge yourself: A good way to prepare for fluid ability and aptitude testing is by continually exploring new concepts. You can start working on how you observe things and, then, try to identify problem areas you can improve. When you approach a situation that requires problem-solving skills, verbalize your sequence of reasoning, approach and thoughts about the problem. Such a mechanism allows your brain to register an example of fluid reasoning in action, letting you consciously internalize fluid reasoning skills. It is also a great idea to document your observations and enlist the different ways in which you think you can solve problems.

2. Study sample question patterns and their answers carefully

Practicing is key for any aptitude test preparation. Hence, you must solve as many sample questions as possible that are relevant to your field. A close look at how logical reasoning problems, puzzles and other abstract ability questions are solved will help you develop a good understanding of what to expect during the tests.

Tips to prepare for crystallized intelligence assessments

Aptitude tests that measure crystallized intelligence are more streamlined and, usually, subject-oriented. So, you can segment your preparation time according to your strengths. For example, if you have excellent language proficiency, you do not need to devote too much time to language-based questions. Instead, you could utilize it to practice subjects in which you need more effort.

1. Make a study schedule

Study schedules ensure that you stay organized. Break down the subjects you need to prepare and allot the time based on your expertise in each. This practice allows you to stay on top of things while keeping your stress levels low.

2. Research the test

Find out information about the test you are about to take. Talking to former test-takers, researching the organization that is rolling out the test and asking your recruiter for some tips can be very helpful. It helps streamline your preparation, practice better and avoid surprises in the test. You should also familiarize yourself with the assessment format, the time limit and other important details.

3. Structure your time

When preparing for an aptitude test, you should also practice timing your questions. While solving sample aptitude test questions, always set a time limit for every section. You can divide it further to ensure you do not waste precious minutes on just a handful of problems. Make it a rule that every time you are stuck on a question, you will move on, solve the others, and then go back to it toward the end. This practice prevents major faux pas during the actual assessment and prevents anxiety, allowing you to focus on your strengths.

4. Read extensively

Reading is imperative if you wish to improve your vocabulary and language proficiency. Whether you explore a diverse library or adhere to your favorite genre, reading is the fundamental step toward preparing for any verbal ability/reasoning/ comprehension assessment. Besides, regular reading is also a proven way to expand your critical thinking abilities, knowledge and overall intelligence. In short, reading makes you smart for life!

5. Practice data interpretation

Data interpretation questions are quite common in numerical reasoning tests. There are also extensively used in general aptitude assessments and vocational ability tests. The more you revise and practice your data interpretation skills, the better you will get at solving these questions quickly and accurately.

6. Familiarize yourself with exchange rates and currency conversion

Aptitude tests may also include questions where you may need to read exchange rates or convert currencies to arrive at an accurate answer. It is a good idea to cover them during your preparation.

7. Refresh your theoretical knowledge

You may not need to return to your elementary school subjects. However, refreshing your memory always helps. Grammatical rules, universal laws, mathematical formulae, science theories, etc., will certainly come in handy during an aptitude test.

8. Take care of yourself

An overworked mind and an exhausted body can never let you live up to your potential. Hence, you must get enough sleep and healthy food before taking any aptitude exam. Stay hydrated during the test. If required, you should also stock up on snacks, especially if the test stretches for hours. This shouldn't be a challenge, with most aptitude assessments going virtual/remote now.



Chapter 4: How employers use aptitude tests: applications of aptitude assessments in hiring

An aptitude test for hiring assesses a candidate's current mental ability and flair for a given profession. From this information, recruiters can capture a candidate's current potential and predict how they will work in a role. Employment aptitude tests are great predictors of job performance. Besides, these tests help employers identify strengths and development areas to facilitate their employees' learning and development plans.

Aptitude tests as an excellent screening tool

An aptitude test for employment is the best way to assess a large group of applicants. It helps filter the most suitable candidates by predicting their job performance, success rate and overall potential. Considering the flexibility and customization possibilities offered by these tests, they serve as an excellent screening tool to shortlist the top talent sought by employers.

Aptitudetest scores correlate with on-the-job performance

Research published by the Midlands State University Institutional Repository states that the three key subtests of DATs- verbal reasoning, numerical reasoning and abstract reasoning- correlate with job performance. Hence, a measure of mental aptitude is a recognized tool to predict job performance. High scores often indicate sharper minds that are best suited for roles for which they are being evaluated.

Aptitude tests help determine job fitment

In-demand aptitudes can largely vary across job categories. Hence, it is essential to have a standardized system that offers clarity on a candidate's job fitment. Tests can be customized to measure mental abilities critical for a specific job or position, making it easier for employers to make hiring decisions.

How aptitude tests are administered for recruitment

With almost every aspect of the professional and academic world getting a digital makeover, modern aptitude tests are easier to administer than ever. Instead of going through the hassles of hosting these tests at a brick-and-mortar venue, employers can easily opt for their virtual version.

Therefore, an employer can simply set up an aptitude exam based on relevant question formats on a cloud-based, secure platform. Once satisfied with any add-on features they need. Afterward, employers can then share the test link with selected applicants.

Maintaining credibility in virtual aptitude tests

Virtual aptitude test platforms can be fortified with remote proctoring and anti-cheating features. When fully automated with smart AI-enabled grading, these tests offer better accuracy in scores, bias-free candidate selection and an overall smoother recruitment process.

Connect with an expert

Chapter 5: Advantages and disadvantages of aptitude testing

Aptitude assessments are undoubtedly a worthwhile investment to help identify suitable prospects in academic and professional scenarios. However, they are not 100 percent flawless. Awareness of their limitations will allow recruiters and institutes to have a more open mind for their selection criteria.

Aptitude test advantages: the pros of aptitude assessment

For starters, aptitude testing facilitates objective comparisons for shortlisting candidates. They are a quantitative metric to understand if an individual's ability to perform is in tune with a specific role's requirements.

- They help save time by screening candidates on relevant mental abilities.
- They allow a fair and unbiased evaluation.
- Aptitude tests offer predictive insights into a candidate's mental abilities and intelligence.
- Their validity rises with increasing job complexity.
- They are scalable and standardized, making it easier to evaluate a large number of applicants.

The disadvantages: limitations of aptitude assessment

Aptitude tests cannot be the only assessment parameter in any screening, recruitment, or development process. Recruiters and educators should utilize a combination of assessment tools to ensure a balanced selection approach.

- They cannot measure all kinds of professional qualities such as punctuality, motivation, time-management, organizational skills, social skills, etc.
- Certain aptitude tests may have a cultural bias, putting some candidates at an advantage over others. Such scenarios usually occur in language proficiency tests, verbal reasoning and communication assessments.
- Aptitude tests only measure mental ability. Hence, they do not offer a holistic approach when you need to evaluate domain-specific skills. Recruiters should combine aptitude tests with other forms of pre-employment assessments to better understand a candidate's suitability.
- Aptitude test scores are not indicative of personality traits. Dedicated personality tests are essential to assess the latter.
- They can induce test anxiety, inhibiting certain candidates from performing to their optimum potential.
- If the recruiter does not choose the right type of aptitude test, it can prove to be an inaccurate and early judgment of a candidate's abilities.

Conclusion

Ability and aptitude tests are an excellent set of tools to learn what a test-taker is good at and what they can be good at with the right training. The vast scope and dynamics of aptitude assessment ensure a streamlined process for making career choices, academic pursuits and professional growth.

The details covered in this guide are extremely valuable for candidates as well as employers, academicians and recruiters.

In what ways has this guide helped you?

Would you want us to add something to the guide?

Let us know.



Connect with an expert

About us

At Mercer I Mettl, our mission is to enable organizations to make better people decisions across two key areas: acquisition and development. Since our inception in 2010, we have partnered with more than 4,000 corporates, 31 sector skills councils/government departments and 15+ educational institutions across more than 90 countries.

☑ contact@mettl.com

🕢 www.mettl.com

Robust Information Security System



Be sure to carefully read and understand all of the disclaimers, limitations and restrictions before using the assessment services, reports, products, psychometric tools or the company systems or website.

Read the complete disclaimer here: https://pages.mettl.com/disclaimer



