

# Developmental Guide

*Practice does not make perfect. Only perfect practice makes perfect*



Lodestar

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## *Cognitive Abilities*

### **Insight into psychometric tests**

Psychometric tests are most popularly used as objective selection tools that measure the abilities, skills, personality to identify suitable candidates for jobs at organisations. It was earlier contested that no preparation would help ace these tests as it measures fluid intelligence. These claims are proven wrong as researchers found that success in the psychometric test is affected by the individual's education and past experience.

Performance on psychometric tests is influenced by acquired knowledge and skills. It has been found that those who receive better education and those who are fresh out of university are more likely to succeed in these tests. Also, it is likely that those who do not have prior exposure to psychometric tests find the test to be difficult, as neither university nor schools prepare students for the psychometric test.

### **How to enhance your abilities?**

Understanding math concepts - practising the different types of numerical reasoning questions, using logical reasoning to solve scenario-based questions - understanding the mindset / context for verbal reasoning, enriching English language vocabulary and exposure to different logically designed patterns and shapes - leading to recognising the patterns in abstract reasoning will significantly improve chances of success in the psychometric test.

Another important factor that influences success is plan the practice tests, work efficiently and effectively.

### **How much can be improved?**

a) Those who have never appeared for a psychometric test will see what the different tests are, understand the types of questions and learn how to effectively answer them.

b) Those who have completed psychometric testing in the past have a better understanding of what to expect in the test. Past results on psychometric tests are not indicative of future results. It may depend on the purpose for the psychometric tests and the test taking population, as most results are reported in percentile. Candidates can improve their results by learning and practising the different types of questions. The results improve with learning and practice.

c) Those who feel that they need to improve in a specific area of the test (numerical, verbal or abstract) - The candidates have to practice more on problems / areas that seem to be a weakness thereby ensuring improvement.

Test preparation reduces anxiety and helps you approach the exam with confidence. From the test results, the candidate will hopefully be able to identify areas of strengths and weakness and practice accordingly for future requirements.

### **Subjectivity:**

The required skill / ability level depends on the the type of occupation you are aiming for. For example, if the candidate is applying for a senior management role, stronger verbal reasoning skills are expected than if the candidate were applying for a graduate role.

### **Verbal Ability**

The verbal ability test is one of the most commonly used test to measure a candidate's performance on English language awareness. The verbal reasoning tests differ in difficulty levels and in types.

### **Tips to Improve:**

1. Answer test questions based only on the information given. The candidate may have extensive knowledge of the specific topic that extends beyond the given information (or may even have information that contradicts the written information).
2. No specific knowledge of any subject is required though the topics for verbal test questions include information / passages from the social sciences, physical or biological sciences, and business-related areas.
3. If English is the candidate's second language, verbal reasoning questions will be found to be harder and so required more practise on these questions.
4. Some useful strategies that will save valuable reading time and improve scores -
  - a) basic reading techniques - Enhance your vocabulary to better understand the content
  - b) reading strategies for the verbal test - While attempting a reading comprehension passage, read the questions before reading the passages.
  - c) how to plan your test time - If the test allows you to attempt the questions you are sure of first, then do so and then spend time on the ones that seem difficult. If it is an online test which is timed, calculate the time allowed for each question and ensure you do not ponder over one question beyond the allotted time.

5. Read articles from newspapers and magazines that ensure high quality standards for language, such as Time magazine, Business Week and The Economist to increase ability to quickly read and grasp written editorial articles.
6. While reading an article, the candidate should analyse the main arguments stated and how the author supports these arguments will help enhance verbal reasoning skills.

### **Numerical Ability -**

It is the ability, whether learnt or perceived as natural capability to process numerical data and conclude a mathematical calculation based on that data.

#### **Tips to improve Numerical Ability**

1. Even if the candidate is good at solving numerical reasoning questions, s/he is still likely to hit some hurdles while taking the numerical test. Therefore, we recommend that the candidate practise as much as possible before taking the real numerical test.
2. Practise solving numerical problems, which are designed to match the level of difficulty of the real numerical test.
3. Solve problems that include arithmetic & algebra - such as simple equations, quadratic equations, ratio & proportion, percentages, permutations & combinations, fractions, etc.,

### **Reasoning Ability**

The reasoning test measures lateral thinking skills or ability to quickly identify logical rules and trends in data, integrate this information, and apply it to solve problems.

#### **Tips to improve Reasoning Ability**

The reasoning ability tests are usually the ones that ask the candidate to quickly analyse information, integrating it to the overall scheme of things, and applying it to solve work-related problems. These tests check the ability to think strategically about problems and developments within the relevant business field. They also measure the ability to efficiently learn new skills, process and analyse new work-related data in a logical manner.

1. To enhance reasoning ability one has to efficiently learn a large number of common logical rules to be able to quickly identify the relevant rule/s for either the next shape in the series, identify a pattern, recognise the missing shape etc.,
2. This ability can be enhanced by practice, concentration and knowledge of test-taking strategies.
3. Solving puzzles, rubix cube, crosswords, Sudoku and similar cognitive activities have been found to enhance the ability to reason.

## **Mechanical Ability**

The mechanical ability test measures the ability to understand and apply mechanical concepts and principles. A mechanical aptitude test includes a set of mechanical problems that must be completed in a predefined time.

### **Tips to improve Mechanical Ability**

1. Improving of mechanical aptitude test can be achieved through developing the right techniques and frameworks to solve problems in a scenario that involves use of tools and understanding the mechanics.
2. Learn and practice problems such as (but is not limited to): Levers, gears, pulleys, springs, screws, acceleration, gravity, clamps, shafts, pressure, friction, weights, volumes, conveyor belts, simple electric circuits, kinetic energy, magnetism, mirrors and reflection and applied math.
3. Practicing to enhance mechanical ability need not be theoretical. Working with tools and objects with hands to understand how they work will help too.
4. Fixing and building things will familiarise one with mechanical concepts.
5. Reading technical user manuals and similar content will help build knowledge.
6. Buy 'Do it yourself kits' and experiment / build models

## **Spatial Ability -**

It is the ability to visualize spatial patterns and mentally manipulate them. Good spatial reasoning skills make it easier to comprehend direction, recognize landmarks or effectively use roads and highways and understand "space and distance" based life situations or solve problems based on these concepts.

### **Tips to improve Spatial Ability**

1. Pursuing hobbies that places big demands on thinking about and manipulating objects in 3D. For example, engine repair, carpentry, metal fabrication or welding, sculpture, cookery, photography and drawing are all activities that use spatial reasoning.
2. Using computer technology like a 3D modelling program can enhance spatial ability by facilitating learning to manipulate shapes.
3. Using a compass and a map is a sure way to help you develop spatial ability through enhancing directional skills, map reading skills and compass reading skills.
4. Reading music and playing an instrument are excellent ways to heighten spatial intelligence too.