OETT Apprenticeship Program Entrance Exam Study Guide 2025

This study guide was developed to assist you in being prepared for what to expect on the Entrance Exam. However, it is just a GUIDE. You are advised to use what you are introduced to in the guide and find additional resources to assist you in studying.

In this study guide you will find:

- Resources and links to material to help you be prepared for the OETT entrance exam.
- Test breakdown and brief explanation of each section of the OETT entrance exam.
- OETT entrance exam terms and concepts to be familiar with.

Online Links to Study Resources:

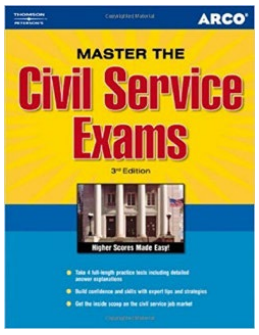
- **Mechanical Aptitude:**
  - Bennet Test App download – has questions very similar to the OETT entrance exam. https://play.google.com/store/apps/details?id=com.alexuvarov.bennettest&hl=en

- **Mathematical tutoring**: YouTube Math Antics

- **Good for Vocabulary, Math, and Mechanical Aptitude:**
  - **ASVAB** Free ASVAB Practice Tests 2025
  - **YouTube** - find video demonstrations that will help tutor you: Example, how force is applied - YouTube
    - You want to know how force works? In YouTube search bar type, "how does force work," and video clips explaining force will be displayed.
    - Math tutor example, how to convert fractions to decimals - YouTube, type in "how to convert fractions to decimals," and video clips explaining it will be displayed.

- **Vocabulary terms:** look up definitions, synonyms, and antonyms @ http://www.dictionary.com/ and http://www.synonym.com.
  - Great verbal reasoning resource –https://www.fibonicci.com/

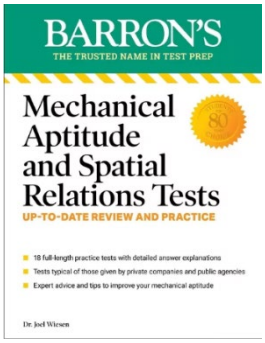
- ## Useful Study Guides:



Master the Civil Service Exams, 3rd Edition, by Shannon R. Turlington

Chapters to Study

- 5 – Synonyms
- 7 – Verbal Analogies
- 15 - Fractions/Decimals
- 16 - Percentages/Ratios



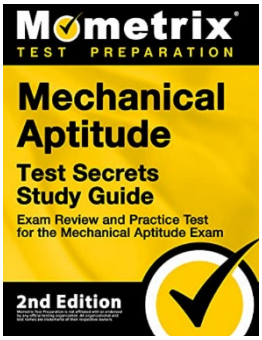
Barron's **Mechanical Aptitude and Spatial Relations Test**, 2023 Edition, by Dr. Joel Wiesen

Chapters to Study

- Ch's 1-6 only
- Relevant Practice Tests in back of book

How2Become **Mechanical Comprehension Tests**, 2017 Edition

Study all Chapters



Mometrix Test Preparation **Mechanical Aptitude Test Secrets Study Guide**, 2023 Edition

Chapters to Study

- 1st 11 Sections
- Relevant Practice Tests

OETT Entrance Exam Breakdown

100 Multiple Choice questions
Length - 60 minutes

Content Area	# of Questions	Brief Explanation
Vocabulary and Verbal Expression • Synonyms - words that mean the same thing. • Antonyms – words that mean the opposite. • Verbal Analogies – word relations.	**35**	When faced with synonym questions, match the term to the word or phrase closest in meaning. Read the question carefully, as it may ask which word does not belong. In that case, it would be the antonym.
Basic Mathematics & Reasoning • Addition, Subtraction, Division and Multiplication ○ Applying these techniques to fractions and decimals • Converting fractions to decimals and decimals to fractions • Knowing how to read a basic graph/table • Knowing how to round to the nearest 10^{th} and 100^{th} • Knowing how to calculate percentages	**20**	Applying these basic mathematical techniques to construction related problems, such as: • adding up pieces of wood • calculating how much it costs for materials by the inch, foot, yard • calculating hourly rate of pay and averages • calculating square and cube footage • calculating radius from diameter • calculating volume and rate of flow

Mechanical Aptitude
• Gravity, weight and movement, i.e. pushing, pulling, swinging and falling
• Understanding how force and mechanical advantage works as it pertains to:
  - weight distribution for levers
  - pulleys
  - wheel/axel radius
  - gears, gear ratios and revolutions p/min (rpm)
• Understand linear speed, friction, resistance & velocity
	45	Ability to:
		• See relationships among different parts of mechanics.
		• Understand basic physics related to work force.
		• Identify basic geometrical shapes.
		• Comprehend movement and mechanical advantage.
		
		Know the difference of these shapes – cone, cylinder, triangle, pyramid, circle, sphere, cube, rectangle and square.

Units & Calculations to be familiar with:

- How many inches are in a foot
- How many feet are in a yard
- How many cubic feet are in a cubic yard
- How to use a ruler or tape measure
- Finding area of a square and/or a rectangle
- Finding volume of a box
- Difference between diameter and radius
- How to calculate an average

TERMS and CONCEPTS to know - understand cause and effect, how, what, where, why and when for each term/concept. How do the terms/concepts relate to our everyday lives?

Mechanical Advantage
Pulley Systems and Mechanical Advantage
Basic physics of Force
Weight Distribution as its applied to a Lever and Effort Force
Centrifugal Force
Velocity
Gear Systems
Gear Teeth Ratios and RPM
Rate of objects falling
How Projectiles work
Gravitational Force
Motion and Projectile
Linear Speed
Friction as Resistance
How a Pendulum works regarding its mass and movement
How Cooling and Heating of a substance works
Flow Rate
Weight Density and Buoyancy How to read a Graph
Order of Operations [PEMDAS]
Percentage
Decimal Place
Feeler Gauge
Ruler
Average
Square Surface Area
Diameter
Radius
Circumference
Volume
Cubic Yard
Cubic Foot

Testing Hints

- Read each question carefully and more than once. Don't let the pictures in the mechanical aptitude section mislead you! You may think you know the answer immediately, but look carefully and utilize problem solving skills before you chose what appears to be the most obvious answer.
- When you don't know an answer, begin to eliminate the answers you know are incorrect. Through the process of elimination, you will have a better chance of making a good guess.