

OETT Apprenticeship Program Entrance Exam Study Guide

It is critical that those wanting a greater chance at getting into the program plan on preparing. It is a very competitive and sought-after career. Just to give you an idea of the numbers and why it is imperative that you spend the time to study for the entrance exam: In 2018, we had 8011 individuals apply, 4589 test, and 3097 who passed with the minimum required score of 70%. So, there are 3097 potential candidates on the applicant list waiting for a phone call to be invited into our program.

That being said, the better you score, the higher you get placed on our Accepted Applicant list, and the more likely it is that you get the invitation to join the program. Furthermore, this study guide is just a GUIDE. It would be in your best interest to find supplementary study materials and practice questions. Lastly, it is highly suggested that you take at least a couple of months to study and not just a few days before you are scheduled for testing. Many who think they do well on our exam come to find they didn't do as well as they thought! That is because many of the questions need and take thought and problem-solving skills. What seems like the obvious answer is not always the case.

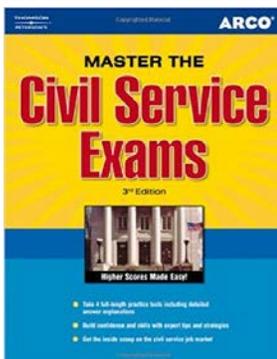
In this study guide you will find:

- 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
- Vocabulary to be familiar with that is directly related to the OETT entrance exam

On Line Links to Study Resources:

- Mechanical Aptitude:
 - Bennet Test download App for Google Play - has questions very similar to the OETT entrance exam @ <https://play.google.com/store/apps/details?id=com.alexuvarov.bennetest&hl=en>
 - Learning Express Mechanical & Spatial Aptitude @ http://booklearning3.tripod.com/Mechanical_Spatial.pdf
- Mathematical tutoring: look up [Math Antics](#) on YouTube or at <http://www.mathantics.com/>.
- Good for vocab, math and mechanical aptitude: ASVAB – Armed Forces Vocational Aptitude Battery @ http://asvabtutor.com/asvab-practice-tests/?gclid=EAIaIQobChMIjuSrwf2s2AIVzpd-Ch1TRACQEAAYiAAEgKuM_D_BwE
- Vocabulary terms: look up definitions, synonyms and antonyms @ <http://www.dictionary.com/> and/or <http://www.synonym.com>.
- Vocab terms, mathematics and/or mechanics – go to YouTube, and find video demonstrations that will help tutor you @ <https://www.youtube.com/>
 - For example, you want to know how force works? In YouTube search bar type, “how does force work,” and video clips explaining force will be displayed.
 - Another example, type in “how to convert fractions to decimals,” you will find tutorial video clips.

Useful Texts (can be found at library or on line):

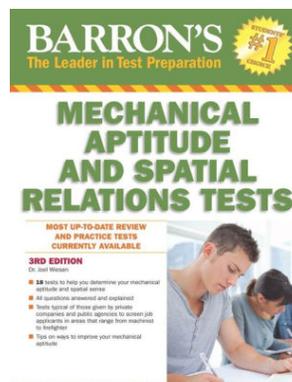


Master the Civil Service Exams,
3rd ed, by Shannon R. Turlington

Chapters to Study

- 5 - Synonyms
- 11 - Mechanical Aptitude
- 15 - Fractions/Decimals
- 16 - Percents/Ratios

***THE REST OF BOOK DOES NOT APPLY!!!**



Barron's
Mechanical Aptitude and Spatial Relations Test,
3rd Edition
by Dr. Joel Wiesen

OETT Entrance Exam Breakdown

Content Area	% of Total	Brief Explanation
<u>Vocabulary and Verbal Expression</u> <ul style="list-style-type: none"> • Synonyms - words that mean the same thing. • Antonyms – words that mean the opposite. 	35%	<p>When faced with synonym questions, match the term to the word or phrase closest in meaning.</p> <p>Read the question carefully, as it may ask which word does not belong. In that case, it would be the antonym.</p>
<u>Basic Mathematics & Reasoning</u> <ul style="list-style-type: none"> • Addition, Subtraction, Division and Multiplication <ul style="list-style-type: none"> ○ Applying these techniques to fractions and decimals • Converting fractions to decimals and decimals to fractions • Knowing how to read a basic chart/table • Knowing how to round to the nearest 10th and 100th • Knowing how to calculate percentages 	20%	<p>Applying these basic mathematical techniques to construction related problems, e.g. adding up pieces of wood, calculating how much it costs for a length of rope, calculating hourly rate of pay, etc.</p>
<u>Mechanical Aptitude</u> <ul style="list-style-type: none"> • Questions related to: <ul style="list-style-type: none"> ○ working with tools, mechanics and gears ○ how weight distribution, heat distribution and gravity work ○ how basic physics work 	45%	<p>Ability to think in terms of third dimension, to see relationships among different parts of a machine and understand how forces in nature work in motion.</p> <p>These questions deal with geometrical shapes, movement, sound, vibration, electrical current, physical force and the environment.</p> <p>Know the difference of these shapes – cone, box, cylinder, triangle, pyramid, circle, sphere, cube, rectangle and square.</p>
Total	100%	<p>Exam - 100 Multiple Choice questions Length - 60 minutes</p>

Units/Formulas to be familiar with:

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

VOCABULARY TERMS FOR OETT ENTRANCE EXAM - understand cause and effect, how, what, where, why and when for each term. focus on how terms are applied and/or relate to our everyday lives. Use images on google to help you visualize each term, helping to leave an imprint in your memory.

Port	Order of Operations	Dimension
Manufacture	Electrical Current	Volume
Labor	Travel of Sound Waves vs Light	Raw Materials
Graph	Winch	Percentage
Consume	Pendulum	Decimal Place
Jeopardy	Plumb Bob	Distance
Option	Insulation	Dozen
Force	Static Friction	Feeler Gauge
Ratio	Kinetic Friction	Ruler
Motion	Diameter	Average
Cram	Radius	Vibration
Fixture	Circumference	Insulation
Expand	Galoshes	Gravitational Force
Praise	Shellac	Surface Area
Hatchet	Pigmentation	Electrical Current
Pursue	Tool	Water Current
Hostile	Incline	Speed of Sound
Skiff	Agent	Weight Distribution
Reflection	Revolve	Windlass
Pulley System	Flame	Temperature
Lever	Agreement	Rate of Cooling
Hydraulic	Currency	Rate of Heating
Valve	Dispose	Projectile
Gear System	Cubic Yard	Leverage (force)
Refraction	Cubic Foot	
Buoyancy (fresh water vs salt water)		

Vocab Hints

- Use a dictionary and thesaurus to look up definitions, synonyms, antonyms and how terms are used in sentences.
 - E.g. the vocab term is Preacher -
 - Definition: a spiritual overseer; a clergyman serving a local church or parish
 - Synonyms (words that mean the same thing): Pastor, Priest, Cleric, Vicar, and Clergyman
 - Antonyms (words that mean the opposite): Layman, Commoner, secular
 - In sentence form: *The use of a Scripture lesson is, of course, optional with the pastor.*

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 but think about them and utilize problem solving skills before you chose the most obvious answer.
- When you don't know an answer, begin to eliminate the answers you know are incorrect. Through process of elimination you will have a better chance of making a good guess.