

OREGON DEPARTMENT OF AGRICULTURE

PESTICIDE

EXAMINATION OUTLINE

To successfully complete this examination, the applicant will need to be familiar with the topics identified in this outline. The outline is not intended to be used as the sole study material and may not be all inclusive of topics covered in the exam. See the ODA website <http://oregon.gov/ODA/PEST/> or the “Guide to Pesticide-Related Licensing in Oregon” (available on the web or by calling 503-986-4635) for details on recommended study material.

It is advisable to bring a small, hand held calculator to the exam session to assist in performing calculations. This exam has 100 questions. A score of 70% is needed to pass the exam. **Government issued photo identification (such as a driver’s license) will be required when you check in for testing.**

OREGON DEPARTMENT OF AGRICULTURE
PESTICIDE EXAMINATION OUTLINE
RIGHT-OF-WAY CATEGORY

- 1) Environment
 - a) Drift
 - i) Particle drift
 - ii) Vapor drift
 - b) Groundwater contamination
 - i) Pesticide transport in the environment
 - ii) Soil types
 - c) Wildlife
 - d) Pesticide persistence
 - i) Factors influencing persistence
 - ii) Processes for degradation
- 2) Calibration, calculations and equipment
 - a) Calibration of spray equipment
 - b) Know how to calculate the following based on word problems that provide relevant variables.
 - i) Application rate
 - ii) Sprayer delivery rate
 - iii) Area of a field
 - iv) How much concentrate to dilute into spray tank
 - v) Miscellaneous problems and combinations of the above.
 - c) Best ways to change sprayer output, application rates, etc.
 - d) Equipment used in right-of-way applications
 - i) Boom-type ground sprayers
 - ii) Truck mounted sprayers
 - iii) Backpack sprayers
- 3) Integrated Pest Management
 - a) Definition of IPM
 - b) Advantages of IPM
 - c) Types of control methods
 - d) Scouting and monitoring
 - e) Economic threshold
 - f) Economic injury level
- 4) Pest characteristics
 - a) Common right-of-way weeds
 - i) Broadleaf, woody and grass
 - ii) Annuals, perennials, biennials
 - iii) What chemicals are effective on what weeds
 - b) Weeds to know
 - i) Canada thistle
 - ii) Dalmation toadflax
 - iii) Diffuse knapweed

- iv) Giant hogweed
- v) Field horsetail
- vi) Gorse
- vii) Hoary cress (whitetop)
- viii) Japanese knotweed
- ix) Leafy spurge
- x) Musk thistle
- xi) Perennial pepperweed
- xii) Puncturevine
- xiii) Kudzu
- xiv) Purple loostrife
- xv) Russian knapweed
- xvi) Russian thistle
- xvii) Scotch broom
- xviii) Scotch thistle
- xix) Spotted knapweed
- xx) St. Johnswort (Klamath weed)
- xxi) Tansy ragwort
- xxii) Woolly distaff thistle
- xxiii) Yellow toadflax
- xxiv) Yellow starthistle

- 5) Safety and handling
 - a) Pesticide transportation, storage and disposal
 - b) Protective clothing and equipment
 - i) General clothing requirements
 - ii) Respirator types and uses
 - iii) Decontamination and cleanup
 - c) First aid
 - i) Signs and symptoms
 - ii) First aid and the label
 - iii) What to do in an emergency
- 6) Pesticide characteristics
 - a) Types of herbicides
 - b) Formulation types
 - c) Adjuvants (what are they used for, types)
 - d) Herbicides to know
 - i) Growth regulator herbicides
 - (1) 2,4-D
 - (2) MCPA
 - (3) Dicamba
 - (4) Clopyralid
 - (5) Picloram
 - (6) Fluroxypyr
 - (7) Triclopyr
 - ii) Lipid inhibitors
 - iii) Amino acid synthesis inhibitors

- (1) Chlorsulfuron
- (2) Metsulfuron
- (3) Sulfometuron
- (4) Glufosinate-ammonium
- (5) Glyphosate
- (6) Imazapyr
- (7) Imazapic
- iv) Seedling growth inhibitors
 - (1) Dichlobenil
 - (2) Oryzalin
 - (3) Pendimethalin
 - (4) Prodiamine
- v) Photosynthesis inhibitors
 - (1) Bromacil
 - (2) Diuron
 - (3) Tebuthiuron
 - (4) Hexazinone
- vi) Cell membrane disruptors
 - (1) Diquat
- vii) Pigment inhibitors
 - (1) Norflurazon
- viii) Plant growth regulators
 - (1) Mefluidide
- ix) Miscellaneous
 - (1) Fosamine
- x) Premixed products
 - (1) Crossbow – 2,4-D and triclopyr
 - (2) Krovar IDF – bromacil and diuron
 - (3) Landmark – chlorsulfuron and sulfometuron methyl
 - (4) Sahara – diuron and imazapyr
- 7) Terminology
 - a) See glossary of terms in study manual
- 8) Label comprehension
 - a) The label is the law
 - b) Parts of the label including:
 - i) Restricted-use vs general-use
 - ii) Precautionary statements
 - iii) First aid
 - iv) Signal words
 - v) Active and other ingredients
 - vi) Directions for use
 - vii) Storage and disposal
 - viii) Be able to answer word problems and calculations based on a sample label