

California Subject Examinations for Teachers®

## **TEST GUIDE**

# AGRICULTURE

### **General Examination Information**

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### **Test Structure for CSET: Agriculture**

CSET: Agriculture consists of three separate subtests, each composed of both multiple-choice and constructed-response questions. Each subtest is scored separately.

The structure of the examination is shown in the table below.

CSET: Agriculture			
Subtest	Domains	Number of Multiple-Choice Questions	Number of Constructed- Response Questions
I	Plant and Soil Science	25	2 short (focused)
	Ornamental Horticulture	15	1 short (focused)
	Subtest Total	40	3 short (focused)
II	Animal Science	25	2 short (focused)
	Environmental Science and Natural Resource Management	15	1 short (focused)
	Subtest Total	40	3 short (focused)
	Agricultural Business and Economics	20	2 short (focused)
	Agricultural Systems Technology	20	1 short (focused)
	Subtest Total	40	3 short (focused)

#### Annotated List of Resources for CSET: Agriculture

This list identifies some resources that may help candidates prepare to take CSET: Agriculture. While not a substitute for coursework or other types of teacher preparation, these resources may enhance a candidate's knowledge of the content covered on the examination. The references listed are not intended to represent a comprehensive listing of all potential resources. Candidates are not expected to read all of the materials listed below, and passage of the examination will not require familiarity with these specific resources. A brief summary is provided for each reference cited. Resources are organized alphabetically and by content domain order in subtest order.

#### **Plant and Soil Science**

Harpstead, Milo I.; Sauer, Thomas J.; and Bennett, William F. (2001). *Soil Science Simplified* (4th edition). Ames, IA: Iowa State Press.

This book gives an introduction to soil science that is easy to comprehend.

Lee, Jasper S., and Turner, Diana L. (2003). Agriscience. Danville, IL: Interstate.

This text offers a comprehensive general overview of agricultural science.

McMahon, Margaret J.; Kofranek, Anton M.; and Rubatzky, Vincent. (2002). *Hartmann's Plant Science:* (3rd edition). Upper Saddle River, NJ: Prentice Hall.

The authors provide a comprehensive introduction to the growth, development, and utilization of cultivated plants.

Plaster, Edward J. (2003). Soil Science and Management (4th edition). Clifton Park, NJ: Delmar Learning.

This text is a classic introduction to soil science at a slightly more advanced level than *Soil Science Simplified*.

Poincelot, Raymond P. (2004). *Sustainable Horticulture Today and Tomorrow*. Upper Saddle River, NJ: Prentice Hall.

This book gives comprehensive coverage of plant science from a sustainable perspective and emphasizes horticultural crops.

#### **Ornamental Horticulture**

Brenzel, Kathleen (Ed.). (2001). Sunset Western Garden Book. Menlo Park, CA: Sunset.

The selections provide comprehensive coverage of gardening and a wide variety of garden plants in the western United States.

Cooper, Elmer L., and Burton, L. DeVere. (2002). *Agriscience: Fundamentals and Applications*. Albany, NY: Delmar.

This text offers a comprehensive general overview of agricultural science.

Davidson, Harold; Mecklenburg, Roy; and Peterson, Curtis. (2000). *Nursery Management: Administration and Culture* (4th edition). Upper Saddle River, NJ: Prentice Hall.

This text is a complete introduction the nursery management.

Hunter, Norah T. (2000). The Art of Floral Design. Albany, NY: Delmar.

The author provides a complete introduction to the fundamentals of floral design.

Nelson, Paul V. (2003). *Greenhouse Operation and Management* (6th edition). Upper Saddle River, NJ: Prentice Hall.

This book covers all aspects of greenhouse management.

#### **Animal Science**

Battaglia, R. A. (2000). Handbook of Livestock Management. Upper Saddle River, NJ: Prentice Hall.

This text is a well-written cursory introduction to animal production and animal science.

Ekarius, Carol. (2004). How to Build Animal Housing. North Adams, MA: Storey Press.

The author provides a sound introduction to animal facilities for the small family farm, including building plans.

Field, Tomas G. (2001). Scientific Farm Animal Production: An Introduction to Animal Science (7th edition). Upper Saddle River, NJ: Prentice Hall.

The author presents a thorough introduction to animal production and animal science.

Gillespie, James R. (2004). *Modern Livestock and Poultry Production* (7th edition). Clifton Park, NJ: Delmar Learning.

This book provides comprehensive coverage of all aspects of animal production, including breed characteristics, housing, diseases, and nutrition.

Palmer, Roger W. (2005). Dairy Modernization. Clifton Park, NJ: Delmar.

This book takes a thorough look at the latest practices in dairy management.

#### **Environmental Science and Natural Resource Management**

Burton, L. DeVere. (2000). Introduction to Forestry Science. Albany, NY: Delmar.

This book is an easy and understandable introduction to forestry science.

Deal, Kevin H. (2003). Wildlife and Natural Resource Management. Clifton Park, NY: Delmar Learning.

This book is an introduction to wildlife management including specific information for a variety of species.

Nebel, Bernard J., and Wright, Richard, T. (2000). *Environmental Science* (7th edition). Upper Saddle River, NJ: Prentice Hall.

The authors give comprehensive coverage of environmental science, ecosystems, and ecology.

Poincelot, Raymond P. (2004). *Sustainable Horticulture Today and Tomorrow*. Upper Saddle River, NJ: Prentice Hall.

The author discusses ecological problems with modern unsustainable practices and offers alternatives.

Powers, Laura E., and McSorley, Robert. (2000). *Ecological Principles of Agriculture*. Albany, NY: Delmar.

This is a higher-level text applying ecological principles to agriculture.

#### **Agricultural Business and Economics**

Drummond, H. Evan, and Goodwin, John W. (2004). *Agricultural Economics* (2nd edition). Upper Saddle River, NJ: Prentice Hall.

This is a higher-level introduction to agribusiness with an emphasis on economics, trade, and marketing.

Gibson, Jerry D.; Usry, Robert H.; Hass, Lanny W.; Liles, Richard T.; and Moore, Gary E. (2001). *Agribusiness*. Danville, IL: Interstate.

The authors provide a general and straightforward introduction to agribusiness, including management, marketing, human resource development, communication, and technology.

Lee, Jasper S., and Turner, Diana L. (2003). Agriscience. Danville, IL: Interstate.

This text offers a comprehensive general overview of agricultural science.

Little, Randall D. (2000). *Economics: Applications to Agriculture and Agribusiness* (4th edition). Danville, IL: Interstate.

The author provides a new edition of a classic text covering the economics of agribusiness.

Uhl, Joseph N. (2001). *Marketing of Agricultural Products* (9th edition). Upper Saddle River, NJ: Prentice Hall.

This introduction to agribusiness puts an emphasis on marketing.

#### **Agricultural Systems Technology**

Lee, Jasper S., and Turner, Diana L. (2003). Agriscience. Danville, IL: Interstate.

This text offers a comprehensive general overview of agricultural science.

Boyd, James S. (1993). Practical Farm Buildings. Danville, IL: Interstate.

This book provides an introduction to various types of farm building and construction techniques.

Herren, Ray V., and Cooper, Elmer, L. (2002). Agricultural Mechanics: Fundamentals and Applications. Albany, NY: Delmar.

The authors cover the fundamentals of agricultural mechanics.

Hunt, Donnell. (2001). Farm Power and Machinery Management. Ames, IA: Iowa State Press.

This text covers farm power machinery including operations, power, and equipment selection.

Ess, Dan, and Morgan, Mark. (2003). *Precision Farming Guide for Agriculturists*. Davenport, IA: John Deere Publishing.

This book is an introduction to the use of technology in precision farming.