



هيئة اعتماد مؤسسات التعليم العالي

*Higher Education Accreditation Commission*

## الكفايات النظرية لعائلة العلوم الزراعية

المركز الوطني للاختبارات

*National Testing Center*

الفصل الثاني

**2014-2013**

### **Agricultural Competencies**

The agricultural sciences related test is designed to cover the following competencies:

**COMPETENCY 1: knowledge of essential facts, concepts, principles, and activities related to agriculture.**

**Sub competencies:**

1. Recognition of the scope of agriculture and its effects on society.
2. Development of skills related to agricultural practices.
3. Acquire Knowledge of fundamental principles and terminology used in agricultural sciences.
4. Knowledge of the recent developments in agriculture.

**COMPETENCY 2: Understanding of essential facts, concepts, principles, and activities related to the basic agricultural disciplines.**

**Sub competencies:**

1. Understanding of basic mathematics and physics essential for agricultural science.
2. Applying principles related to chemistry and biology essential for agricultural activities.
3. Acquiring basic understanding of plant and applies principles and methods used in plant production and management.
4. Acquiring basic understanding of irrigation concept and soil science.
5. Acquiring basic understanding of animal science and applies principles and methods used in animal production and management.
6. Acquiring basic understanding of agricultural mechanics and technology.
7. Acquiring basic understanding and applies principles of economics and business management in agricultural enterprises.
8. Acquire basic skills of biotechnology principles in agriculture.

9. knowledge of basic concepts related to environment and resources.
10. Knowledge of principles of food and nutrition sciences.
11. Knowledge of landscaping principles in agriculture.

**COMPETENCY 3: Understand and apply procedures and practices to ensure ethical responsibility in accomplishing agricultural operations.**

**Sub competencies:**

1. Understanding legal and ethical issues related to agriculture (e.g., ethical treatment of animals...).
2. Understanding the importance of ethical decision-making to one's career and the importance of ethical decision-making demonstrate commitment to his mission.
3. Ensuring that policies and programs for preventing waste, fraud, abuse, and mismanagement are in place and enforced.

**COMPETENCY 4: Knowledge of principles of planning, problem solving, decision-making characteristics in agricultural practices:**

**Sub competencies:**

1. Knowledge of management strategies (e.g., training and supervising personnel, fostering teamwork).
2. Knowledge of planning strategies related to in agriculture.
3. Knowledge of critical thinking skills related to problem solving and decision making in agricultural activities.
4. Making difficult or controversial decisions when necessary.

**COMPETENCY 5: Acquiring communication skills and leadership characteristics in agricultural activities:**

**Sub competencies:**

1. Acquiring basic effective oral and written communication skills related to agriculture; and promoting teamwork, motivation, and leadership principles.
2. Assessing necessary team-building skills.
3. Knowledge of time management principles in agricultural activities.
4. Developing alternative approaches and scenarios to accommodate different potential situations.
5. Knowledge of information-based technologies related to agriculture.

**COMPETENCY 6: Knowledge of application procedures and practices to ensure the safe agricultural activities.**

**Sub competencies:**

1. Knowledge of personal and occupational safety practices in agricultural activities.
2. Ability to determine potential hazards in agricultural activities.
3. Applying strategies for proper and safe use of materials, tools, and instruments, and for monitoring personnel behavior in the agricultural facilities.
4. Knowledge of environmental protection laws and policies.

**COMPETENCY 7: Knowledge and application of scientific methods in agricultural research.**

**Sub competencies:**

- 1. Understand the use of information necessary for conducting researches in agriculture.**
- 2. Ability to collect primary and secondary data needed to conduct agricultural research.**
- 3. Ability to analyze data using different statistical techniques.**

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