## **Inside Hours Ag 102**

- 1. B Classify soils according to origin of plant materials
- 2. B Identify the composition of an average soil
- 3. B Recognize importance of soils to the nation.
- 4. B Identify and discuss the factors of soil formation.
- 5. B Explain the importance of soils to the state.
- 6. B Observe characteristics of soil formation in the community.
- 7. B Discuss relationships among soils, plants, and animals.
- 8. B List and describe soil profile horizons.
- 9. B Identify uses of different soils.
- 10.B Explain the importance of soil to agriculture.
- 11.B Identify the categories of the formal soil classification system.
- 12.B Use a published soil survey to identify soils in the community.
- 13.B Collect soil samples having different characteristics/properties.
- 14.C Recognize physiological similarities/differences between plant and animal cells.
- 15.C Describe major structural parts of the plant cell.
- 16.C Identify types of plant tissue.
- 17.C Explain structural parts and functions of plant roots, stems, leaves, and flowers.
- 18.C Identify and discuss major functions of seeds.
- 19.C Explain basic conditions necessary for seed germination.
- 20.C Describe photosynthesis.
- 21.C Explain the ecological importance of plants.
- 22.C Describe the relationship of plants and animals.
- 23.C Explain respiration in plants.
- 24.C Define and explain transpiration.
- 25.C Discuss sexual reproduction of flowering plants.
- 26.C Explain asexual reproduction of plants.
- 27.C Explain plant traits used in plant breeding.
- 28.C Recognize and explain plant breeding methods.
- 29.C Recognize various methods of classifying crops.
- 30.C Discuss basic plant structures and identify plants.
- 31.D Discuss processes and periods of growth in animals.
- 32. D Relate the importance of nutrition to growth of animals.
- 33.D Describe the external anatomy of animals.
- 34.D Discuss the skeletal system of animals.
- 35.D Discuss the muscular system of animals.
- 36.D Explain the circulatory system of animals.
- 37.D Explain the respiratory system of animals.
- 38.D Discuss the digestive system of animals.
- 39.D Explain the differences between ruminant and nonruminant animals.
- 40.D Identify livestock species as ruminant or nonruminant.
- 41.D Explain the process of digestion in ruminant and nonruminant animals.
- 42.D Identify characteristics of the major beef breeds.

- 43.D Describe uses of the major beef cattle breeds.
- 44.D Identify characteristics of the major dairy cattle breeds
- 45.D Explain various methods of selecting beef cattle.
- 46.D Identify the basic functions of animals in society.
- 47.D Explain proper management of animal enterprises.
- 48.D Identify basic concepts of the livestock industry.
- 49.E Discuss development of new low-cost foods.
- 50. E Describe the scope and components of the food science and technology industry.
- 51.E Explain marketing strategies in the food science and technology industry.
- 52. E Describe the importance of and trends in beef, pork, mutton, and poultry production.
- 53. E Identify wholesale cuts of beef.
- 54. E Identify retail cuts of beef.
- 55.E Identify wholesale cuts of pork.
- 56.E Identify retail cuts of pork.
- 57.E Explain the role of meat processing facilities in food science.
- 58. F Name and describe the major areas of agricultural mechanics.
- 59. F Discuss trends in agricultural mechanics.
- 60. F Practice proper behavior and follow correct laboratory procedures.
- 61.F Discuss the importance of tools.
- 62.G Explain the role and scope of fertilizer use in the world.
- 63.G Define and explain primary elements and fertilizer classification.
- 64.G Identify alternative energy sources appropriate for agriculture.
- 65.G Describe uses of alternative energy sources in agriculture.
- 66.G Identify demographics of water usage and requirements.
- 67.G Diagram and describe the hydrological cycle.
- 68.G Discuss methods for conserving water in agriculture.
- 69.G Discuss methods for conserving energy in agriculture.
- 70. A Explore career opportunities in applied agricultural science.
- 71. A Explore career opportunities in applied agricultural technology.
- 72.H Analyze agriculture experience programs in agricultural science.
- 73.H Discuss leadership activities in applied agriculture.
- 74.H Discuss the importance of the FFA in developing leadership skills.
- 75.H Identify qualities of leadership.