

	Test Content Categories		Required	Course	e Numb	ers		
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ge 1	I. Agribusiness Systems (12%)							
	A. Know the principles of capitalism and entrepreneurship in the agribusiness industry							
	Describe how supply and demand interact to determine the price of agricultural commodities							
	2. Describe the law of diminishing returns							
	3. Distinguish between fixed and variable costs							
	Distinguish between marginal cost and marginal return							
	5. Distinguish between inputs and outputs, and makes decisions based on costs and availability							
	6. Distinguish among current and noncurrent assets and liabilities							
	7. Identify the opportunity costs within an agribusiness							
	8. Compare and contrast the main characteristics of individual proprietorships, partnerships, cooperatives, and corporations							
	9. Distinguish among the sectors of agribusiness (e.g., producer, service, processing, and marketing)							
	10. Identify methods of reducing risk in an agribusiness							
	B. Know the management skills needed to organize an agribusiness.							
	Identify and describe key components of a contract and a lease							
	2. Describe diversification and specialization in agribusiness							



Test	Content Categories		Require	d Cours	e Numb	ers		
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	lerstand basic management skills (e.g., uling, hiring, purchasing)							
4. Des	cribe the components of an agribusiness plan							
making	erstand steps in the management decision- g process							
	w the record keeping needed to accomplish siness objectives							
1. Des	cribe the purposes of enterprise records							
2. Dev	elop and complete an enterprise budget							
3. Dev	elop a balance sheet and analyzes its uses							
4. Com	nplete and interpret a cash-flow statement							
invent								
6. Desc	cribe depreciation							
describ	elop an income/expense statement and be its purposes							
	miliar with generally accepted accounting es for making agribusiness decisions							
	cribe the differences between single- and e-entry methods of accounting							
2. Con	nplete a break-even analysis for an enterprise							
	lyze the important financial ratios and itions (e.g., net worth, debt to equity, cv)							
	miliar with the fundamentals of savings,							



Test Content Categories			Require	d Cours	e Numb	ers		
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ge 3 investments, and credit in agribusiness								
Identify the importance of a savings and investment plan								
2. Identify the sources of credit								
3. Describe ways to build and maintain credit								
4. Describe a business proposal								
F. Is familiar with the marketing principles needed to accomplish agribusiness objectives								
Describe the components and purpose of a promotional campaign								
Describe key factors involved in marketing (e.g. product knowledge, service knowledge, customer knowledge)								
3. Describe how market prices and cycles affect agricultural commodities								
4. Describe commodity futures and options tradin	g							
5. Distinguish between hedging and speculation								
II. Animal Systems (16%)								
A. Is familiar with the historical development and trends of the animal systems industry								
1. Explain past, current, and emerging trends related to the animal agricultural industry								
2. Describe the domestication of animals								
B. Know the classification, anatomical, and physiological characteristics of animals								



Test Content Categories		Required	l Cours	e Numb	ers		
age 4 1. Identify the major species of livestock							
2. Understand the taxonomical classification system of animals							
3. Identify the structure and function of the major body systems of animals (e.g., digestive, reproductive, respiratory)							
4. Define terms used to distinguish animals by sex, age, and physical traits in livestock							
C. Is familiar with proper health care of animals							
1. Describe the use of vaccination and immunization in the animal science industry							
2. Select proper routes of administration of medications and vaccines on various animal species							
3. Describe methods of controlling parasites of livestock							
4. Describe noninfectious and infectious diseases and disorders							
D. Know basic principles of animal nutrition							
Describe the importance of proper nutrition for animal production							
Differentiate between ruminant and nonruminant digestion							
3. Identify the major groups of nutrients (e.g., proteins, carbohydrates, minerals)							
4. Describe the general principles involved in balancing a ration							
5. Calculate a balanced ration given animal requirements and feed composition using the							



	est Content Categories		Require	d Cours	e Numl	oers		
5	Pearson's square method							
	6. Describe symptoms of common nutrient deficiencies							
	E. Know the basic principles of animal production and management							
	Select market and breeding livestock based on visual assessment							
	2. Select animals to cull based on performance data							
	3. Describe grading systems of livestock (e.g., feeder, quality, and yield)							
	4. Interpret expected progeny differences (EPDs) to make production decisions							
	5. Describe processes involved in cell division, including how genes affect the transmission of characteristics							
	6. Complete Punnett square crosses for one-factor and two-factor crosses							
	7. Define phenotype and genotype of animals							
	8. Describe management procedures needed for effective livestock production (e.g., castration, docking, dehorning)							
	9. Define crossbreeding, grading up, inbreeding, linebreeding, and purebred breeding							
	F. Know safety practices related to animal production							
	Describe basic procedures for handling animal materials (e.g., vaccinations, supplements)							
	Describe safe animal-handling procedures							



	Test Content Categories		ı	Require	d Cours	e Numb	ers		
	· ·								
Page 6	3. Identify the components of a safety and biosecurity plan for a specific class of animals G. Is familiar with normal and abnormal animal behavior								
	Differentiate between normal and abnormal behavior in common livestock animals								
	2. Identify causes of abnormal behavior in common livestock animals								
	H. Is familiar with the proper design and use of animal facilities and the equipment for safe and efficient production								
	1. Identify common styles of facilities for common livestock production (dairy cattle, swine, beef cattle, etc.)								
	Identify safe and effective facility designs based on animal species and environment								
	3. Describe equipment needed for safe and effective handling of common livestock animals (e.g., squeeze chute, twitch, grooming stand, etc.)								
	I. Know the principles and practices of basic animal reproduction								
	Define terminology related to reproductive management and breeding systems, including castration, estrus, gestation, lactation, parturition								
	Explain the role of the estrus cycle, ovulation, heat detection, and fertilization in animal reproduction management								
	3. Define gestation and parturition								
	4. Identifiy practices and principles related to animal reproduction (e.g., artificial insemination, embryo transfer, selective breeding)								



	est Content Categories			Require	d Cours	e Numb	oers		
Page 7	J. Is familiar with the effects of environmental conditions on animal production 1. Understand that various environmental conditions affect animal agriculture (e.g., air, water, temperature)								
	Describe the effect of detrimental environmental conditions on livestock (e.g., health, production, reproduction)								
	3. Define gestation and parturition								
	4. Identify practices and principles related to animal reproduction (e.g., artificial insemination, embryo transfer, selective breeding)								
	J. Is familiar with the effects of environmental conditions on animal production								
	1. Understand that various environmental conditions affect animal agriculture (e.g., air, water, temperature)								
	2. Describe the effect of detrimental environmental conditions on livestock (e.g., health, production, reproduction)								
	K. Is familiar with the impacts of animal production on the environment								
	Describe environmental conditions affected by animal production								
	2. Describe the importance of a waste-management and animal-disposal plan for livestock operations								
	L. Is familiar with the issues related to animal rights, animal welfare, and producer responsibilities								
	Differentiate between animal welfare and animal rights								



	Test Content Categories		ı	Require	d Cours	e Numb	ers		
	J								
Page 8	Describe the United States Department of Agriculture (USDA) inspection process for livestock processing and handling facilities								
	III. Food Science and Biotechnology Systems (12%)								
	A. Know major issues and trends affecting the food products and processing industry								
	1. Identify major trends and developments in the food products and processing industry (e.g., buy local, free range, irradiated beef)								
	2. Describe dietary trends affecting the food industry (e.g., low fat, sugar free, gluten free)								
	B. Is familiar with industry organizations, groups, and regulatory agencies that affect the food products and processing industry								
	Identify major industry organizations, groups, and agencies that affect food products and processing								
	2. Describe how the USDA and the United States Food and Drug Administration (FDA) regulate the food products and processing industry (e.g., country-of-origin labeling, nutrition labeling, and inspections)								
	C. Is familiar with the safety principles and recommended equipment and facility management practices related to the food products and processing industry								
	Define the hazard analysis and critical control points (HACCP) and other major food safety practices								
	2. Describe the importance of controlled features in the processing of food (e.g., temperature, moisture,								



	Test Content Categories	Required Course Numbers											
Page 9	sanitation)												
	D. Is familiar with selecting, harvesting, processing, and classifying food products for storage, distribution, and consumption												
	Describe the purpose of grading to select food products for a specific use												
	Describe the methods by which value can be added to agricultural commodities												
	3. Identify basic processing techniques (e.g., preservation, homogenization, meat fabrication)												
	E. Is familiar with major innovations, historical developments, and applications of biotechnology in agriculture												
	I. Identify the major biotechnological innovations (e.g., increased yields, herbicide tolerance, and insect resistance)												
	Describe the advantages provided to the local producer by the application of advances in biotechnology												
	F. Is familiar with the ethical, legal, social, cultural, safety, and environmental issues related to biotechnology												
	Identify the major legal and ethical issues surrounding the adoption of biotechnology												
	2. Identify the social and cultural issues related to agricultural biotechnology (e.g., resistance to the use of genetically modified organisms [GMO], hormones)												
	3. Identify the economic impact of biotechnology												
	4. Describe the environmental issues related to agricultural biotechnology (e.g., herbicide												



	Test Content Categories	Ļ	Rec	uired Cou	rse Num	bers		
ge 10	resistance in weeds, beneficial-insect decline)							
	G. Know basic, safe laboratory procedures							
	1. Identify the principles of aseptic technique							
	2. Identify hazards in a biotechnology lab							
	3. Identify the safety equipment needed to properly conduct a laboratory experiment							
	Describe safe handling of laboratory materials, chemicals, and equipment							
	H. Is familiar with the various uses of genetic engineering in the agricultural industry							
	Identify the uses of genetic engineering, cloning, stem-cell research in agriculture							
	Identify the purpose of genetically modifying organisms in agriculture							
	IV. Environmental and Natural Resource Systems (14%)							
	A. Is familiar with natural cycles related to environmental and natural resource management							
	Identify and explain the carbon cycle, water cycle, and nitrogen cycle as related to the environment							
	B. Is familiar with chemical properties related to environmental and natural resources							
	Differentiate between organic and inorganic compounds							
	Describe preemergence and postemergence herbicides							
	3. Describe selective and nonselective herbicides							



	Test Content Categories			Require	d Cours	e Numb	ers		
Page 11	4. Describe the effects of chemicals on organisms at different levels of the food chain (e.g., biomagnification)								
	5. Differentiate between point and nonpoint source pollution								
	C. Know the various ecosystems of the environment								
	Identify and describe the various types of ecosystems (e.g., biomes, aquatic versus terrestrial)								
	Identify biotic and abiotic factors that define an ecosystem								
	D. Is familiar with the ecological concepts and principles related to natural resource systems								
	Describe the benefits of rotational grazing								
	Identify common forestry harvest techniques (e.g., clear-cut, thinning)								
	3. Explain the process of succession in a forest								
	4. Describe the purpose of reforestation (e.g., soil erosion, water quality, sustainability)								
	5. Explain the difference between preservation and conservation								
	6. Describe the concepts of population growth and carrying capacity								
	E. Is familiar with the current issues and regulations in environmental and natural resource management								
	Identify the federal agencies responsible for environmental regulation and natural resource management (e.g., United States Environmental								
	Protection Agency [EPA], Natural Resources Conservation Service [NRCS], and Bureau of Land								



	Test Content Categories		ı	Require	d Cours	e Numb	ers		
Page 12	Management [BLM])								
	Describe the impact of federal regulations on agriculture production (e.g., Endangered Species Act [ESA], water rights)								
	F. Know the use of personal protective equipment (PPE) and safety procedures related to environmental and natural resource management								
	I. Identify PPE and safety procedures related to environmental and natural resources (e.g., forestry, fisheries, wildlife)								
	G. Is familiar with the role of environmental and natural resource management in the local, state, and national economies								
	1. Describe the importance of hunting, trapping, fishing, and outdoor recreation to the economy								
	2. Know significant legislative milestones related to natural resources (e.g., Clean Air Act, Clean Water Act)								
	3. Explain the contributions of environmental and natural resource management to the national economy								
	H. Is familiar with the impact of conventional and alternative energy sources on the environment								
	Identify environmental impacts of energy production								
	2. Identify and explain the use of conventional and alternative energy sources (e.g., fossil fuels, solar, biomass)								
	I. Is familiar with wetlands and their role in the environment								
	1. Explain the role of wetlands in the environment and the need for wetland conservation (e.g., flood								



	Test Content Categories	1	Requ	ired Cours	e Numb	ers		
Page 13	control, wildlife habitat)							
	J. Is familiar with the use, production, and processing of natural resources							
	Identify products derived from natural resources (e.g., wood products, fuels, fish, and wildlife)							
	Differentiate between renewable and nonrenewable resources							
	K. Is familiar with procedures used to develop an environmental and natural resource management plan							
	Describe population sampling techniques (e.g., quadrant sampling, electrofishing in aquatic systems, radio tracking)							
	2. Describe the relationship between a species and the habitat needed to support that species							
	3. Describe a food web							
	4. Explain the importance of an indicator species							
	L. Know the general impact of land use on environmental and natural resources							
	Describe methods used to limit erosion and runoff (e.g., buffers, windbreaks)							
	2. Describe best management practices and explains how they benefit the environment (e.g., stocking rate, protection of critical wildlife habitat)							
	3. Describe the effects of urban sprawl on the environment							
	V. Plant Systems (16%)							
	A. Know the historical development of plant science and its relationship with society							



	Test Content Categories		R	equired C	ourse Nu	ımbers		
Page 14	(e.g., food, fiber, shelter)							
	2. Identify the major milestones and advances of plant science (e.g., plant genetics, soil amendments)							
	3. Understand the importance of plants in the global food supply							
	B. Know general safety issues related to plant systems							
	Identify and describe safety hazards related to plant production systems (e.g., chemicals, equipment, and tools)							
	Define hazardous plant classifications (e.g., noxious, invasive)							
	3. Identify and understand the use of personal protective equipment (PPE)							
	4. Interpret material safety data sheet (MSDS) information							
	5. Know guidelines for safe pesticide use							
	C. Know the basic principles of identification, classification, anatomy, and physiology as related to plant production and management							
	Understand the taxonomical classification system of plants and the importance of binomial nomenclature							
	2. Differentiate between monocots and dicots							
	3. Describe reproductive and vegetative plant parts and their functions (e.g., roots absorption, stem support)							
	Describe major plant processes (e.g., photosynthesis, transpiration, respiration)							



Test Content Categories		Require	ed Cours	e Numb	ers		
age 15 5. Identify and classify plants according to use and growth habits (e.g., agronomic, horticultural, annual, perennial)							
6. Differentiate between herbaceous and woody plants							
D. Is familiar with the influence of environmental factors on plant growth							
Describe how temperature, light, moisture, and air affect plant growth							
Interpret USDA Plant Hardiness Zone Maps							
E. Is familiar with propagation, cultivation, and harvesting of plants							
Describe sexual reproduction in plants (e.g., fertilization, germination, pollination)							
Describe asexual propagation methods (e.g., cutting, layering, grafting)							
Identify major types of cultivation for horticultural crops, including hydroponics							
4. Identify major types of cultivation for agronomic crops							
5. Identify harvesting techniques (e.g., hand, mechanical)							
F. Know the basic characteristics of both soils and growing media and their uses							
Identify the macronutrients and micronutrients needed for plant growth							
2. Describe the role of nitrogen (N), phosphorus (P), and potassium (K) in plant growth							
3. Explain the role soil pH plays in plant production							



	Test Content Categories		Re	equired Co	ırse Num	bers		
Page 16	4. Understand the materials used in soilless media, such as vermiculite, perlite, sphagnum moss, and horticultural-grade sand							
	5. Explain soil structure and texture as related to plant growth							
	6. Describe the types of water in soil (e.g., gravitational, capillary, available)							
	7. Describe the horizons within a soil profile							
	8. Understand the basics of soil conservation practices							
	G. Is familiar with the use of integrated pest management (IPM) in plant production							
	Describe IPM and its purposes							
	2. Differentiate between cultural, biological, mechanical (physical), and chemical controls							
	3. Describe the types and uses of pesticides (e.g., herbicides, fungicides, insecticides)							
	H. Is familiar with production and management practices associated with horticultural crops							
	 Identify proper management and production techniques related to greenhouses, orchards, gardens, and nurseries 							
	Describe greenhouse structures and systems							
	3. Describe the divisions of horticulture: pomology, floriculture, landscape, olericulture							
	4. Describe the importance of growth regulators							
	I. Is familiar with production and management practices associated with agronomic crops							



	Test Content Categories		Requi	red Cours	e Num	bers		
Page 17	Identify equipment used in cultivating and harvesting agronomic crops							
	Identify and describe the production and management practices of agronomic crops							
	3. Explain the importance of weed and pest control in agronomic crop production							
	4. Describe the divisions of agronomic crops (e.g., cereal grains, forage, oil, fiber)							
	5. Describe the purposes of crop rotation							
	J. Is familiar with the principles and elements of landscape and floral design							
	Identify and describe the principles and elements of landscape and floral design							
	VI. Power, Structural, and Technical Systems (15%)							
	A. Is familiar with the physical science principles and engineering applications associated with power, structural, and technical systems							
	Describe the basic principles of hydraulics (e.g., single-acting, double-acting cylinders)							
	2. Describe the basic principles of pneumatics							
	3. Differentiate among basic metals as they pertain to a welding shop (e.g., mild steel, cast iron, brass, and copper)							
	4. Describe horsepower for engines, equipment, and electrical motors							
	5. Differentiate among conduction, convection, and radiation							
	6. Describe principles of oil viscosity and lubrication							



	Test Content Categories		Requir	red Cours	e Numl	oers		_
Page 18	B. Is familiar with electricity and electrical wiring							
	Identify proper safety procedures with electricity and electrical wiring							
	2. Define common electrical terms (e.g., amp, volt, ohm, watt, kilowatt, kilowatt hour, conductor, resistance, and transformer)							
	3. Determine amperage, voltage, horsepower, wattage, and rpm from the nameplate on an electric motor							
	4. Identify the importance of grounding and ground fault circuit interrupters (GFCI)							
	5. Calculate electrical power usage and cost using Ohm's law							
	6. Interpret electrical diagrams of common 110-120 volt AC electrical circuits (e.g., single-pole switches, three-way switches, outlets, GFCI, fixtures)							
	7. Distinguish the differences between AC and DC circuits							
	8. Identify conductors and insulators							
	C. Is familiar with various power and energy sources							
	Describe proper safety procedures when dealing with power and energy sources							
	2. Compare and contrast the benefits and costs of various energy sources (e.g., wind, solar, hydro, coal, nuclear)							
	3. Differentiate among energy sources (e.g., internal combustion, mechanical, electrical)							
	D. Is familiar with the principles of power, energy transfer, and conversion							



	Test Content Categories		1	Require	d Cours	e Numb	ers		
Page 19	Describe the basic operating principles of an electric motor								
	2. Describe the basic principles of gears and pulleys								
	3. Describe gear reduction and multipliers								
	Describe the transfer of power/energy from a motor to an implement								
	E. Know the proper use, storage, and disposal of potentially hazardous materials common to the agricultural mechanics laboratory								
	Describe the importance of proper laboratory safety								
	2. Interpret MSDS instructions and precautions								
	3. Identify Occupational Safety and Health Administration (OSHA) regulations regarding laboratory safety colors and uses								
	Explain the proper storage of compressed-gas bottles according to OSHA regulations								
	5. Describe the proper storage and disposal of hazardous materials (e.g., fuels, pesticides, paints)								
	F. Know the safe operation and maintenance of hand tools, power tools, and other equipment								
	Identify potential safety hazards in the agricultural mechanics laboratory								
	2. Identify and follow OSHA regulations								
	3. Identify hand tools and determine their uses								
	4. Identify power tools and determine their uses								



	Test Content Categories		ı	Require	d Course	e Numb	ers		
Page 20	5. Identify the proper use of electrical wiring tools and supplies								
	6. Describe the basic use and maintenance of common pneumatic shop equipment (e.g., air compressor, impact wrench)								
	7. Describe hand-tool and power-tool maintenance								
	G. Is familiar with the principles of small-engine operation, maintenance, and repair								
	Identify basic maintenance procedures and adjustments of internal combustion engines								
	2. Identify the basic parts of a small gas engine								
	3. Describe the four-stroke cycle and two-stroke cycle								
	4. Describe the principles of spark-ignition engine (gas) operation								
	5. Describe the basic principles of compression engine (diesel) operation								
	6. Identify the different fuels used in internal combustion engines								
	7. Describe engine displacement								
	H. Is familiar with the planning and building of structures								
	Describe safety practices associated with building construction								
	2. Read and interpret project plans for agricultural- structure projects								
	3. Discuss the importance of slope, elevation, and grades in site preparation								



	Test Content Categories		Requi	red Cours	e Numb	pers		
Page 21	4. Identify types and designs of buildings							
	5. Identify and select construction materials.							
	6. Calculate a bill of materials							
	7. Define basic framing terminology (e.g., studs, headers, cripple studs)							
	8. Describe the purpose of walls, types of walls, supports, and siding used in agricultural buildings							
	9. Identify factors affecting the heating, cooling, and ventilation of agricultural structures							
	I. Is familiar with metal fabrication and welding							
	Describe and identify metal shop safety procedures and equipment							
	2. Describe different types of welding (e.g., shielded metal-arc welding (SMAW), gas metal-arc welding (GMAW), flux-cored arc welding (FCAW), and tungsten-inert gas (TIG) welding, oxy-fuel welding, and brazing)							
	3. Identify common welding joints, including lap, butt, and fillet							
	4. Describe basic arc welding procedures and terminology (e.g., positions, classifying rods, polarity)							
	5. Describe proper metal cutting practices (e.g., oxyfuel, plasma, cutoff saws, and shears)							
	6. Describe basic oxy-fuel welding procedures and terminology (e.g., positions, equipment setup and selection)							



	Test Content Categories		F	Require	d Cours	e Numb	ers		
Page 22	7. Describe the fundamentals of cold metal work								
	J. Is familiar with the installation, maintenance, and repair of water systems								
	Describe safety practices for plumbing								
	2. Describe the process of plastic pipe fitting								
	3. Describe the process of sweating copper pipe								
	4. Identify methods of protecting water pipes against freezing								
	5. Identify different plumbing materials and common joints								
	K. Is familiar with the application of technology to the agriculture industry								
	Define the term GIS (Geographic Information System) and explain its relationship to GPS (Global Positioning System)								
	2. Explain how GPS and GIS are used in precision agriculture								
	3. List the common applications of GPS technology in agriculture								
	4. Identify potential applications for computer- controlled technology (e.g., greenhouse controls, computer numerical control machines, automated equipment)								
	L. Is familiar with the use of technical and mathematical approaches to map land, facilities, and infrastructure								
	Determine land area in acres and location from diagrams or legal description								



	Test Content Categories 2. Describe basic surveying procedures and equipment 3. Calculate slope, elevation, and grades VII. Leadership and Career Development (15%) A. Know the principles of leadership 1. Describe the importance of personal leadership development (e.g., personality, leadership style, Maslow's hierarchy) 2. Describe various forms of leadership (e.g., democratic, authoritarian, situational) B. Know the foundational areas of career development 1. Describe how to develop a career plan (e.g., strengths, values, interests) 2. Develop a career plan to meet career goals (e.g., education, employment, lifestyle goals) 3. Describe the various components related to job preparation (e.g., resume development,		F	Require	d Cours	e Numb	ers		
Page 23	3 0 1								
	3. Calculate slope, elevation, and grades								
	VII. Leadership and Career Development (15%)								
	A. Know the principles of leadership								
	development (e.g., personality, leadership style,								
	democratic, authoritarian, situational)								
	B. Know the foundational areas of career development								
	strengths, values, interests)								
	education, employment, lifestyle goals)								
	preparation (e.g., resume development, interviewing, and overall business etiquette)								
	C. Understand the purpose, structure, and function of the National FFA Organization								
	Identify the FFA mission statement, creed, motto, ceremonies, and salute								
	2. Identify different types of FFA membership								
	3. Describe major historical moments and figures of FFA (e.g., founded in 1928, NFA, E. M. Tiffany, girls allowed in 1969, Henry C. Groseclose)								



	Test Content Categories		ı	Require	d Cours	e Numb	pers		
Page 24	4. Identify the constitutional officer positions and their duties								
	5. Know the FFA degrees								
	6. Understand the importance of the Program of Activities and FFA Committee structures								
	D. Know individual and team leadership skills								
	Understand basic parliamentary procedural motions described in the FFA manual								
	Describe proper presentation and disposal of a main motion								
	3. Describe the purpose of parliamentary procedure in an FFA meeting								
	4. Describe team-building skills (e.g., motivation, communication, influence)								
	5. Differentiate between the positive and negative attributes of a leader								
	6. Identify the importance of ethics in leadership								
	E. Know communication skills								
	Describe effective communication skills (e.g., written, verbal, and nonverbal)								
	Identify techniques to improve listening, reading, writing, speaking, and nonverbal communication skills								
	F. Know information research skills to make informed decisions								
	Describe how to determine validity and reliability of a source (e.g., author, date, bibliography, type of source)								



	Test Content Categories	Required Course Numbers									
Page 25	2. Understand the scientific method										
	G. Understand supervised agricultural experiences (SAE)										
	1. Describe the purpose of an SAE										
	2. Describe the major types of SAEs (e.g., entrepreneurship, placement, agriscience, agribusiness, exploratory)										
	3. Describe how to develop an SAE program										
	4. Identify student advancement and awards related to the SAE program (e.g., degrees, proficiency awards)										
	5. Apply basic financial record-keeping skills for the establishment and maintenance of an SAE										
	H. Know career opportunities across the various pathways of agriculture										
	Describe the various career pathways within the Agriculture, Food, and Natural Resources Career Cluster										
	2. Identify the specific skills and education needed for career pathways										
	3. Describe agricultural careers available to students in an agricultural education program										
	I. Is familiar with local program planning and management										
	Identify and describe the three components of a comprehensive agricultural education program										
	Define the scope and sequence for a secondary agricultural education program										



	Test Content Categories	Required Course Numbers									
Page 26	3. Identify the purpose and importance of an advisory committee										
	4. Identify and describe career development events (CDEs) and their purpose										
	5. Identify FFA award programs (e.g., degree programs and applications, proficiencies, leadership awards, scholarships)										