Directions: Each day at the start of class spend about five minutes completing the question of the day along with your equation for that particular day. It is your responsibility to complete both the questions and the equations daily. Each Friday I will grade both your questions and equations for that week.

1. What is the meat of swine?

   a. beef
   b. lamb
   c. mutton
   d. pork

2. What produces fibers used in making a high quality cloth called linen?

   a. cotton
   b. hemp
   c. flax
   d. kenaf

3. Paper is made by breaking wood into smaller pieces, known as _____.

   a. conifer
   b. pulp
   c. papyrus
   d. slush

4. What are products bought from another nation?

   a. imports
   b. exports
   c. ports
   d. tariffs

5. Today, one American farmer feeds roughly _____ people.

   a. 25
   b. 90
   c. 130
   d. 250

6. What is using a person's knowledge and skills to produce a valuable product or service?

   a. wages
   b. salary
   c. employee benefits
   d. employment

7. Which type of occupation requires specialized training in performing processes, using equipment, and carrying out activities?

   a. professional
   b. managerial
   c. technical
   d. unskilled

8. What is one of six major areas of agriculture that is concerned with the many areas in raising livestock (including livestock products such as milk and eggs) and growing crops?

   a. agriculture production
   b. forestry
   c. agricultural mechanics and technology
   d. supplies and services

9. What is a term used for the upward movement in a career from entry level to more responsible positions?

   a. job ladder
   b. task ladder
   c. work ladder
   d. career ladder

10. What is creating goods or services to meet the needs of other people or businesses?

a. employment
b. entrepreneurship
c. occupation
d. work

11. The National FFA Organization was established on _____.

a. December 25, 1948
b. November 20, 1928
c. October 31, 1926
d. September 1, 1951

12. Who is known as the father of the FFA?

a. Henry Groseclose
b. C.H. Lane
c. Leslie Applegate
d. E. M. Tiffany

13. What type of FFA membership includes those enrolled in agricultural/horticultural classes, and has paid their membership dues?

a. active
b. alumni
c. collegiate
d. honorary

14. Which section of the program of activities includes activities that provide for leadership, personal growth, and SAE experience?

a. student development division
b. chapter development division
c. community development division
d. chapter award division

15. Who wrote the FFA creed?

a. Henry Groseclose
b. C.H. Lane
c. Leslie Applegate
d. E.M. Tiffany

16. What is the ability to influence other people to meet individual or group goals?

a. leadership
b. personal growth
c. career success
d. citizenship

17. What is developing skills to have a good life?

a. leadership
b. personal growth
c. career success
d. citizenship

18. How does the FFA promote career success?

a. by providing several offices for leadership
b. through recognition of excellence in horticulture and the development of skills for career advancement
c. by being a good member of the community and country
d. by demonstrating manners and respect to others

19. What is a FFA program that involves foreign exchange?

a. Food for America
b. Partners for a Safer Community
c. Partners in Active Learning Support (PALS)
d. Work Experience Abroad (WEA)

20. What is a national collaborative effort to promote horticulture safety and health through education, community development, and youth leadership?

a. Food for America
b. Partners for a Safer Community
c. Partners in Active Learning Support
d. Work Experience Abroad (WEA)

21. What degree can first year members in the FFA earn?

a. greenhand degree
b. chapter FFA degree
c. state FFA degree
d. American FFA degree

22. What is the highest degree in the FFA.

a. greenhand
b. chapter FFA degree
c. state FFA degree
d. American FFA degree

23. How does the FFA recognize members who have an outstanding SAE, Supervised Agriculture Experience Program?

a. Agriculture/Horticulture Proficiency Award Program
b. chapter FFA degree
c. state FFA degree
d. Career Development Events (CDE's)

24. What allows members to exhibit their skills in areas that are part of horticulture classroom instruction, and often the skills of a team are evaluated?

a. Agriculture/Horticulture Proficiency Award Program
b. chapter FFA degree
c. state FFA degree
d. Career Development Events (CDE's)

25. What is the ability of a student to give a speech without rehearsing or being prepared?

a. extemporaneous public speaking
b. prepared public speaking
c. creed speaking
d. all the above

26. What is symbolized by "the rising sun"?

a. treasurer
b. secretary
c. vice-president
d. president

27. What is symbolized by "the owl"?

a. historian
b. parliamentarian
c. sentinel
d. advisor

28. What does official FFA dress involve?

a. jeans, dress shoes, FFA jacket
b. black slacks blue shirt, dress shoes
c. gym shoes, FFA jacket, white shirt
d. black slacks, dress shoes, FFA jacket

29. Which of the four areas important to leadership must involve respect between leader and followers?

a. influence
b. process
c. relationship
d. service

30. What is symbolized by the “bust of Washington”?

a. treasurer
b. secretary
c. sentinel
d. advisor

31. Supervised horticultural/agricultural experience (SAE) programs provide a method in horticultural education for students to _____.

a. receive real-world experience
b. explore and identify interests
c. make money
d. all the above

32. The area of work a person pursues is known as a _____.

a. job
b. task
c. career
d. position

33. What is a term used for the upward movement of people in their area of work?

a. job ladder
b. task ladder
c. career ladder
d. position ladder

34. A comprehensive agricultural program includes which three components?

a. classroom/laboratory instruction, FFA program, homework
b. SAE program, supervised study, field trips
c. classroom/laboratory instruction, FFA program, SAE program
d. homework, FFA program, SAE program

35. What is an important purpose and benefit of a SAE programs?

a. Giving practical meaning to courses studied in school.
b. Work without an opportunity for recognition.
c. Get out of school early to work.
d. Provide educational and work experiences outside of the agriculture industry

36. What is a SAE program where the student is placed with an employer in a production unit such as a farm, greenhouse, nursery, etc. to produce commodities for wages?

a. production enterprise
b. agribusiness enterprise
c. placement SAE
d. exploratory SAE

37. What is a science based experience using laboratory procedures to study a problem?

a. entrepreneurship SAE
b. research and experimentation SAE
c. placement SAE
d. exploratory SAE

38. What is the term for a SAE program in which students own plants or animals?

a. production enterprise
b. agribusiness enterprise
c. placement SAE
d. exploratory SAE

39. What is a characteristic of a good SAE program?

a. little chance for growth or expansion
b. provides experience during a single season of the year
c. based on student interests
d. narrowly focused

40. Which is an example of an exploratory SAE?

a. Setting up a lawn care service.
b. Raising beef, sheep, and swine.
c. Operating a horseshoeing business.
d. Observing the work of a veterinarian

.

41. What is the part of the agricultural industry that hauls, grades, processes, packages, and markets commodities from production sources?

a. production agriculture
b. landscape horticulture
c. agriculture processing, products, and distribution
d. agriculture supply and service

42. What is a collection of courses in an area of study that earns a degree?

a. major
b. college
c. associates degree
d. diploma

43. What is having personally done something or worked in a particular job or location?

a. people skills
b. experience
c. resource inventory
d. major

44. What is the design, operation, maintenance, service, selling, and use of power units, machinery, equipment, structures, and utilities in agriculture?

a. pomology
b. forestry
c. horticulture science
d. agriculture mechanics

45. What should students do when exploring SAE programs?

a. Avoid the teacher's advice for ideas on SAE's, because it's not necessarily what's best for you.
b. Don't observe what successful students from the past have done, because you have to do something different.
c. Consider personal interest in selecting an SAE.
d. Don't look at proficiency awards on display in the classroom, because they don't mean anything.

46. Which of the following is a guideline for planning an SAE program?

a. Plan for experiences only in the summer.
b. Discuss the SAE program only with your teacher.
c. Keep the scope of the SAE the same every year.
d. Develop a budget.

47. A description of a placement project would include which of the following?

a. location
b. partners involved
c. methods of marketing
d. facilities required

48. What term is used for activities that improve the appearance, convenience, efficiency, safety, or value of a home, farm, ranch, business, or other agriculture facility?

a. supplementary skills
b. improvement projects
c. improvement description
d. supplemental activities

49. What is a form that lists the experiences to be gained in an SAE program?

a. a training plan
b. a training station
c. a training agreement
d. a training session

50. What is a form that makes the SAE program official?

a. a training plan
b. a training station
c. a training agreement
d. a training session

51. Which of the following is an approved practice that should be followed in keeping records on a SAE program?

a. Be sure to record details at least once a month.
b. Keep records on a calendar year basis beginning September 1.
c. Review the record book every week to make sure all entries are current.
d. Keep the record book in your locker.

52. What helps to determine if the SAE enterprise/program is profitable or worthy of the time devoted?

a. a profit
b. good records
c. a gut feeling
d. comments from your peers

53. What is a record of anticipated expenses and income for the SAE program?

a. a budget
b. receipts and expenses
c. cash flow statement
d . inventory

54. What is a list of items on hand at the beginning and at the end of the SAE program.

a. a budget
b. receipts and expenses
c. cash flow statement
d. inventory

55. What is sometimes called a net worth statement, determines financial worth at any point in time over the course of the SAE program?

a. a budget
b. receipts and expenses statement
c. cash flow statement
d. financial statement

56. Safety means:

a. preventing injury and loss
b. staying out of harms way
c. working slowly
d. reading all the instructions

57. How is an accident defined?

a. a danger where risk is present
b. an event that occurs unintentionally
c. chance that an accident will occur
d. an event that occurs intentionally

58. How is a hazard defined?

a. a danger where risk is present
b. an event that occurs unintentionally
c. the chance that an accident will occur
d. an event that occurs intentionally

59. What is failing to pay attention to hazards and taking unnecessary risk?

a. carelessness
b. concentration
c. focus
d. distraction

60. Which of the following should be done to avoid hazards with laboratory equipment?

a. Touch or taste the substances.
b. Inhale fumes.
c. Never use broken or cracked glassware.
d. Conduct experiments in unventilated areas

61. What typically refers to all of the tools and equipment used together to perform a particular function?

a. tool
b. apparatus
c. equipment
d. implement

62. What is equipment that sterilizes devices used to perform agriscience work to assure that the devices do not harbor microbes that could contaminate work?

a. autoclave
b. balance
c. thermometer
d. scale

63. What is apparatus used to determine the quantity or dimensions of something?

a. measuring equipment
b. glassware
c. dissection equipment
d. observation equipment

64. What is used to prevent injury and respond to accidents that may occur?

a. cleaning equipment
b. heating equipment
c. safety equipment
d. measuring equipment

65. Keeping equipment in good condition is _____.

a. safety
b. storage
c. installation
d. maintenance

66. What is an instrument that uses lens to observe a specimen that has been well illuminated?

a. optical microscope
b. scanning probe microscope
c. electron microscope
d. ion microscope

67. The lens in the microscope eyepiece is known as the _____.

a. objective lens
b. ocular lens
c. eye lens
d. magnification lens

68. _____ in the microscope body move the tube up and down to adjust focus.

a. The tube
b. The body
c. The adjustment knobs
d. The foot

69. What is the purpose of lens paper?

a. to dry microscope slides
b. to blot specimens before viewing
c. to clean the lens
d. to record observations

70. What is a very thin piece of glass that is used to cover the water and slow the rate of evaporation?

a. slide
b. temporary wet-mount slide
c. cover glass
d. staining solution

71. Prokaryotic cells are _____.

a. cells that contain a distinct cell nucleus
b. organisms that have only one cell
c. organisms that are composed of many cells
d. cells that lack a nucleus

72. What does biogenesis mean?

a. that life comes from life
b. nonliving things produce life
c. life appears spontaneously
d. all life is multicellular

73. What part of the cell controls all of the cell's activity and contains the chromosomes?

a. cell membrane
b. vacuole
c. nucleus
d. endoplasmic reticulum

74. What is a jelly-like substance between the cell membrane and the nuclear membrane?

a. lysosomes
b. cytoplasm
c. chloroplast
d. cellulose

75. Which of the following describes the function of mitochondria?

a. contains green pigments called chlorophyll that trap light energy for photosynthesis
b. manufactures adenosine triphosphate (ATP), which is used as an energy source for the cell
c. produces the proteins for the cell
d. produces the fats for the cell

76. Who discovered that traits are inherited through units called genes?

a. Watson and Crick
b. Gregor Mendel
c. Eli Whitney
d. John Deere

77. Sex cells are also called _____.

a. zygotes
b. ovules
c. gametes
d. genes

78. What is an organism's physical or outward appearance?

a. phenotype
b. genotype
c. derrigotype
d. genetic code

79. What is homozygous?

a. having similar alleles or genes on the DNA molecule for a particular trait
b. having different alleles for a particular trait
c. part of the genotype the organism expresses or shows
d. genes from both mother and father, and displays characteristics from both

80. What are traits that cover up or mask the alleles of other traits?

a. dominant
b. recessive
c. codominance
d. incomplete dominance

81. How do mitosis and meiosis differ?

a. Meiosis is a sequential process of cell division through which one cell becomes two, and mitosis is the division of cells in the reproductive process.
b. Mitosis is the division of cells in the reproductive process, and meiosis is a sequential process of cell division through which one cell becomes two.
c. Mitosis is a sequential process of cell division through which one cell becomes two and meiosis is the division of cells in the reproductive process.
d. Mitosis results in haploid cells, and meiosis results in diploid cells.

82. Which is the third stage of mitosis where the chromosomes separate and move to opposite sides of the cell?

a. prophase
b. anaphase
c. interphase
d. telophase

83. Which cells have only a single set of chromosomes?

a. haploid
b. diploid
c. polyploid
d. tetraploid

84. Female gametes are known as _____.

a. spermatozoa
b. sperm
c. diploid
d. ova

85. How many cells result from meiosis?

a. 1
b. 2
c. 3
d. 4

86. What is a reason those involved in the agriculture industry find ways to produce more products by using fewer resources, such as land, labor, feed, seed, etc.?

a. the world's population continues to drop
b. because of urbanization producers are expected to produce more food using more land
c. fewer people are becoming involved in production agriculture
d. all the above

87. _____ involves breeding offspring of the same parents to each other

a. Controlled breeding
b. Crossbreeding
c. Inbreeding
d. Hybridizin

88. What is an artificial means of producing desirable traits?

a. selection
b. genetic manipulation
c. hybridizing
d. inbreeding

89. A specific type of inbreeding is called _____.

a. Linebreeding
b. Outbreeding
c. Crossbreeding
d. Selection

90. _____ is the increase in a performance trait that exceeds the average of the parents.

a. Hybrid weakness or heterosis
b. Homozygous traits or hybrid vigor
c. Heterozygous traits, but hybrid weakness
d. Heterosis or hybrid vigor

91. What is a living organism that has the capacity to make its own food through a process known as photosynthesis?

a. plant
b. animal
c. bacteria
d. virus

92. The classification of plants and other living things is known as _____.

a. physiology
b. anatomy
c. morphology
d. taxonomy

93. What is the study of the internal and external appearance of an organism?

a. physiology
b. anatomy
c. morphology
d. taxonomy

94. What are “everyday” names that people use for plants?

a. genus
b. species
c. scientific names
d. common names

95. Why are scientific names important?

a. They make exchange of research information more secure.
b. There is no confusion about which plant is being discussed.
c. Scientists and agriculturalists only accept common names.
d. All the above

96. What is formed by tissues that work together to perform specific functions?

a. a cell
b. a multi-cellular organism
c. an organ
d. a transportation system

97. What is the central axis that supports the leaves connects them with the roots, and transports water and other materials between the leaves and roots?

a. stem
b. root
c. leaf
d. flower

98. Which of the following is a type of root?

a. rhizome
b. stolon
c. fibrous
d. tuber

99. What is the fleshy structure within a seed that contains food for a developing embryo?

a. dicotyledon
b. embryo
c. leaf
d. cotyledon

100. _____ is the tissue that conducts sugars, proteins, hormones, dissolved materials, and salts from leaves to other parts of a plant.

a. xylem
b. phloem
c. stomata
d. vessels

101. What part of the flower produces pollen?

a. stamen
b. stigma
c. pistil
d. style

102. A flower that has sepals, petals, stamens, and pistils is said to be a _____.

a. perfect flower
b. imperfect flower
c. complete flower
d. incomplete flower

103. Fertilization takes place when _____.

a pollen grain fertilizes the egg
b. pollen grain lands on the stigma
c. a sperm cell fuses with the egg
d. pollen is released from the another

104. What is the fertilized ovary of a plant that grows to produce and protect seed?

a. cotyledon
b. fruit
c. seed coat
d. endosperm

105. What is the part of the seed that forms the root system of the plant?

a. radicle
b. hypocotyl
c. epicotyl
d. plumule

106. Agronomy is the specialized area of plant science that deals with _____.

a. forest crops
b. horticultural crops
c. field crops
d. vegetable crops

107. How are grain crops defined?

a. plants that provide a source of sucrose
b. plants grown for their edible seeds, but do not include horticultural crops
c. plants grown for the vegetable oil contained in their seeds and fruit
d. plants grown for the fiber produced in their fruit, leaves, or stems

108. What is the production and use of plants for their flowers and foliage?

a. floriculture
b. horticulture
c. olericulture
d. pomology

109. What is the science of producing fruits and nuts?

a. floriculture
b. horticulture
c. olericulture
d. pomology

110. The _____ of the tree is the upper portion of the tree.

a. trunk
b. roots
c. crown
d. stump

111. What is the process by which a plant turns light energy into chemical energy in the form of sugar?

a. cellular respiration
b. fertilization
c. photosynthesis
d. pollination

112. Which of the following are products of photosynthesis?

a. water, oxygen and sugars
b. water, carbon dioxide, and starches
c. oxygen, carbon dioxide, and sugars
d. oxygen, sugars, and carbon monoxide

113. Which of the following can affect the rate of respiration?

a. oxygen
b. temperature
c. light
d. all the above

114. Pores or openings in the plant that allow for the exchange of water and other substances are called _____.

a. mesophyll
b. stomata
c. petioles
d. glands

115. What is a result of the Calvin cycle?

a. the formation one molecule of cellulose
b. the breaking of bonds of one oxygen molecule
c. the formation one molecule of glucose
d. the formation of one molecule of carbon dioxide

116. What are abnormal conditions of plants that interfere with their normal appearance, growth structure, or function?

a. rodents
b. weeds
c. diseases
d. insects

117. What are the three factors that must be present before an infectious disease can infect a plant?

a. a susceptible host, a favorable environment, and the presence of a pest
b. moisture, optimum temperatures, and the presence of a pest
c. a weakened host, cold temperatures, and fungi
d. fungi, bacteria, and viruses

118. What refers to a broad variety of methods used to control pest species in fields, gardens, greenhouses, and human lives in general?

a. economic injury level
b. economic threshold
c. biological and genetic controls
d. integrated pest management

119. Which of the following is an example of cultural control of a pest?

a. plowing
b. crop rotation
c. mowing
d. mulching

120. _____ involve the use of pesticides to kill harmful levels of pest populations.

a. Genetic controls
b. Biological controls
c. Chemical controls
d. Mechanical controls

121. What is the outermost layer of the earth's crust that provides nutrients for plant growth?

a. bedrock
b. organic matter
c. soil
d. humus

122. _____ is composed of heat-treated mica.

a. vermiculite
b. perlite
c. coir
d. sand

123. Which is true of soil and soilless media?

a. soil media is more expensive
b. soil media is more uniform
c. soil media is free of weed seeds, insects, and pathogens
d. soilless mix lacks soil

124. Which of the following is a factor that affects soil formation?

a. the original materials from which soil is developed
b. the amount of plants growing in an area is important because it influences how much organic matter is added to the soil
c. the slope or the characteristics of the land
d. all the above

125. Which of the following is a common method used to sterilize soil?

a. boiling
b. steaming
c. baking
d. roasting

126. What are substances essential for growth and production?

a. fertilizers
b. nitrobacter bacteria
c. nutrients
d. nitrosomas bacteria

127. Which four of the 16 essential nutrients are classified as non- mineral nutrients?

a. nitrogen, phosphorus, potassium, and calcium
b. magnesium, copper, iron, and manganese
c. oxygen, nitrogen, hydrogen, and helium
d. carbon, oxygen, hydrogen, and nitrogen

128. The _____ is the process that converts nitrogen gas to forms that are usable to plants.

a. nitrogen cycle
b. carbon cycle
c. water cycle
d. nutrient cycle

129. Generally plants grow best within the pH range of _____.

a. 4.0 to 6.0
b. 5.5 to 8.0
c. 7.3 to 9.6
d. 2.7 to 5.5

130. What are materials that are added to growing media to provide the plant with the necessary nutrients?

a. sand, silt, and clay
b. peat moss or coir
c. fertilizers
d. pesticides

131. Sexual reproduction involves which of the following?

a. genetically identical offspring
b. offspring called clones
c. new genetic combinations in the offspring
d. reproduction without the need of egg or sperm cells

132. When pollen from a plant pollinates a flower of the same plant it is _____.

a. self-pollination
b. cross-pollination
c. fertilization
d. hybridization

133. How is fertilization in flowering plants different from fertilization in any other living organism?

a. It involves both the sperm and an egg.
b. It is accomplished through wind pollination.
c. Both sperm nuclei in the pollen grain are involved in fertilization, resulting in a double fertilization.
d. Two cotyledons are formed.

134. Cotyledons do which of the following?

a. form the first roots of the plant
b. develop into the true stems
c. from the first true leaves
d. provide food for the developing embryo

135. What is the name given to the seed dormancy mechanism that requires a seed to undergo cold temperatures before it will germinate?

a. scarification
b. stratification
c. fertilization
d. pollination

136. Asexual propagation involves _____.

a. pollination
b. reproduction of plants using only vegetative parts
c. new genetic combinations in the offspring
d. fertilization of an egg by sperm

137. What is the cutting that includes a leaf, the petiole, and a short piece of stem with a bud?

a. leaf-bud cutting
b. stem cutting
c. leaf cutting
d. semi-hardwood cutting

138. Which is the best definition for grafting?

a. the process of connecting two plant parts together in such a way that they will unite and grow as a single plant
b. plant parts are simply removed and planted
c. plant roots or the entire plant is cut to make two or more plants from the original plant
d. propagation method in which roots form on the stem of the plant while it is still attached to the parent plant

139. Bending a branch to the ground, wounding it, and covering it with 2-3 inches of soil is an example of which of the following?

a. simple layering
b. trench layering
c. mound layering
d. air layering

140. What is tissue culture?

a. the process of connecting two plant parts together in such a way that they will unite and grow as a single plant
b. growing fertilized seeds into mature plants
c. dividing plant roots or the entire plant into two or more plants by cutting the original plant
d. growing plant cells or small pieces of plant tissue, called explants on an artificial medium under sterile conditions

141. What is a living thing that varies in size and shape and is a structural unit that carries out chemical and life processes?

a. locomotion
b. organism
c. plant
d. protoplasm

142. What is an organism that uses nutrients to make the food needed for life processes?

a. animal
b. plant
c. virus
d. bacteria

143. Which of the following is a similarity between plants and animals?

a. Both have an annual life cycle.
b. Both carry out processes to remain in the living condition.
c. Both are made of protoplasm.
d. Both must have sunlight.

144. Which of the following is a difference between plants and animals?

a. Animals take up nutrients in water and make their own food.
b. Plants are capable of locomotion (moving about). Animals cannot move about on their own.
c. Animal cells have cell walls. A membrane is located inside the wall. Plant cells do not have walls.
d. Photosynthesis and respiration both occur in plants. Animals only have respiration.

145. What is a life process that involves the awareness of an organism to its environment and the responses it makes to it?

a. sensation
b. secretion
c. circulation
d. respiration

146. What is the study of the functions of the cells, tissues, organs, and organ systems of the living organism?

a. morphology
b. anatomy
c. physiology
d. biology

147. _____ is a group of cells that is alike in activity and structure.

a. An organ
b. An organ system
c. A muscle group
d. A tissue

148. What is animal well-being?

a. caring for animals so that their needs are met and they do not suffer
b. free range living conditions
c. care that does not meet animal needs
d. watering and fertilizing at the appropriate times

149. The _____ is the framework that gives shape to the body.

a. muscular system
b. skeletal system
c. nervous system
d. digestive system

150. Which is true about the major external parts of animals?

a. They are the same from one animal to the next.
b. They do not indicate the value, health, and condition of an animal.
c. Qualities vary with the species and the way the species is used.
d. They lack names for identification.

151. What is the process by which animals produce offspring?

a. fertilization
b. lactation
c. parturition
d. reproduction

152. _____ is the process of removing the testes from a male.

a. castration
b. neutering
c. spaying
d. steering

153. What is the ovary?

a. the external part of the female reproductive tract
b. the organ that produces the egg/ova
c. the entrance to the uterus
d. the organ in which the embryo and fetus develop

154. Which phase of the estrous cycle is when the female is in heat?

a. proestrus
b. metestrus
c. diestrus
d. estrus

155. What is the period when a female is pregnant?

a. parturition
b. lactation
c. gestation
d. fertilization

156. What is the area of the animal industry that provides the goods or products needed to produce animals?

a. animal production
b. animal services
c. animal supplies
d. animal marketing

157. What is an animal kept by humans for enjoyment in a long-term relationship?

a. mutton
b. draft animal
c. companion animal
d. game animal

158. What is removing animals from wild settings and raising them in a controlled environment?

a. feral animals
b. wildlife
c. captivated animals
d. animal domestication

159. _____ is the kind and amount of feed and water an animal needs and how the animal uses these food substances.

a. Animal selection
b. Animal nutrition
c. Animal reproduction
d. Animal environment

160. Which of the following describes animal health?

a. the condition in which the animal is free of disease and all body systems are properly functioning
b. the surroundings of an animal
c. the process by which offspring are produced
d. choosing animals to achieve desired goals

161. _____ is knowledge obtained through a systematic study of naturally occurring phenomena.

a. Applied research
b. Basic Research
c. Science
d. Chemistry

162. What investigates why or how processes occur in plants and animals?

a. Applied research
b. Basic Research
c. Science
d. Chemistry

163. What are the four major areas of science? .

a. earth science, geology, meteorology, and chemistry
b. botany, zoology, chemistry, and physics
c. arithmetic, geology, chemistry, and social science
d. mathematics, physical science, life science, and social science

163. What is agronomy?

a. It deals with the study of plants and how they relate to the soil.
b. It is growing and using plants for d. their beauty.
c. It is the area dealing with the production of animals for food.
d. It is the science of wisely using and protecting the earth's resources

164. What is true about advancements that have been made through agriscience?

a. Progress is slow and it has been years since a significant discovery has been made.
b. Genetic engineering has not made a big impact in agriculture.
c. Genetic engineering has revolutionized the agriculture industry.
d. All the above

165. How is the scientific method defined?

a. It is a carefully controlled, systematic process for discovering the unknown.
b. It is a tentatively accepted theory that explains the relationship between two variables.
c. It is a test that attempts to isolate the important factors.
d. It is the exact duplication of the experiment.

166. What is a hypothesis?

a. It is a carefully controlled, systematic process for discovering the unknown.
b. It is a tentatively accepted theory that explains the relationship between two variables.
c. It is a test that attempts to isolate the important factors.
d. It is the exact duplication of the experiment.

167. A _____ is a characteristic by which an object of phenomenon may be described.

a. experiment
b. replication
c. treatment
d. variable

168. How does an independent variable differ from a dependent variable?

a. An independent variable is the characteristic that the researcher believes will affect another variable and a dependent variable is the characteristic that will be observed.
b. A dependent variable is the characteristic that the researcher believes will affect another variable and an independent variable is the characteristic that will be observed.
c. An independent variable is the characteristic that the researcher believes will no affect another variable and a dependent variable is the characteristic that always stays the same.
d. An independent variable is replicated and a dependent variable is manipulated.

169. What are conditions in an experiment that remain the same called?

a. controls
b. data
c. constants
d. conclusions

170. _____ represents openings in soil occupied by air and water.

a. Inorganic matter
b. Mineral matter
c. Organic matter
d. Pore space

171. What is soil?

a. a thick layer of parent materials in which plant roots grow
b. a layer on the earth's crust that provides a combination of resources
c. dirt and airborne particulates that have collected over the years
d. minerals made available and recycled through decaying material

172. Which of the following is an agricultural use or uses of soil?

a. playgrounds, sports fields, jogging paths, golf courses, parks, campgrounds
b. the treatment of human sanitary waste
c. land on which soil is worked and crops are planted, cared for, and harvested
d. soil provides a solid base for buildings to remain structurally sound

173. What do earthworms, ants, crawfish, moles, and other organisms improve?

a. nutrient diversity
b. mineral matter
c. symbiosis
d. soil tilth

174. What do plants obtain from soil?

a. anchorage, nutrients, oxygen, water
b. anchorage, carbon dioxide, mycorrhizae, water
c. carbon dioxide, fertilizers, oxygen, water
d. fertilizers, mineral matter, organic matter, water

175. What is a vertical cross section of the soil?

a. soil erosion
b. soil profile
c. soil structure
d. soil texture

176. A soil profile is usually studied to a depth of _____.

a. 6-12 inches
b. 1-2 feet
c. 3 to 5 feet
d. 8-10 feet

177. How is the term translocations defined?

a. Materials may be moved within the soil, such as, deeper leaching into the soil or upward movement caused by evaporating water.
b. Materials may be lost from the soil as a result of deep leaching or erosion from the surface.
c. Materials such as fallen leaves, windblown dust, or chemicals from air pollution may be added to the soil.
d. Materials may be altered in the soil including the decay of organic matter, the weathering of minerals to smaller particles, and chemical reactions.

178. What is the uppermost layer of soil consisting of an organic layer made up of partially decayed plant and animal debris?

a. A
b. B
c. O
d. R

179. What term describes the loss of clay, iron, and other materials from topsoil over time due to leaching?

a. aviation
b. eluviation
c. illuviation
d. ullinviation

180. What is capillary moisture?

a. the water held within the pore spaces between soil particles against the forces of gravity
b. the water that tightly clings to the soil particles and forms a thin film around individual soil particles
c. the water that moves downward through the soil as a result of gravity
d. the water that carries essential nutrients into the roots of plants