**Quiz Bowl MC State Staff**

**MULTIPLE CHOICE**

 1. Who is the father of FFA?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Smith Hughes | c. | E.M. Tiffany |
| b. | Henry Groseclose | d. | Leslie Applegate |

ANS: B PTS: 1

 2. In what year was Public Law 740 passed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1917 | c. | 1928 |
| b. | 1950 | d. | 1965 |

ANS: B PTS: 1

 3. What is the official salute of the FFA?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | FFA Motto | c. | Pledge of Allegiance |
| b. | God Bless America | d. | National Anthem |

ANS: C PTS: 1

 5. When was the FFA Creed adopted?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1930 | c. | 1917 |
| b. | 1928 | d. | 1933 |

ANS: A PTS: 1

 6. Where was the first National Convention held?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Kansas City, MO | c. | Louisville, KY |
| b. | Kansas City, KS | d. | Indianapolis, IN |

ANS: A PTS: 1

 7. In what year were agriculture classes created in high schools?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1917 | c. | 1928 |
| b. | 1930 | d. | 1933 |

ANS: A PTS: 1

 8. What is the first degree that you can earn while in 7th or 8th grade?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Discovery | c. | Greenhand |
| b. | Chapter | d. | State |

ANS: A PTS: 1

 9. What type of FFA membership is for people who support FFA?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Honorary | c. | Collegiate |
| b. | Active | d. | Alumni |

ANS: A PTS: 1

 10. In the opening ceremonies, what is the Vice-President stationed by?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Rising Sun | c. | Door |
| b. | Flag | d. | Plow |

ANS: D PTS: 1

 11. One tap of the gavel means?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Sit | c. | Stand |
| b. | Come to order | d. | Talk |

ANS: A PTS: 1

 14. Which material is the best insulator of electricity?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | aluminum foil | c. | copper |
| b. | rubber | d. | paper clip |

ANS: B PTS: 1

 15. When performing an experiment with electricity which material would act like an insulator?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | wire | c. | popsicle stick |
| b. | staple | d. |  paper clip |

ANS: C PTS: 1

 16. What would happen if a wire in a closed circuit were cut?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the battery would lose its charge | c. | the glass would crack |
| b. | the light would go out | d. | the wire would become hot |

ANS: B PTS: 1

 17. 2 objects have collected static w/same charge. What would they do when placed near each other?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | repel | c. | nothing  |
| b. | attract | d. | stick together |

ANS: A PTS: 1

 18. In a parallel circuit...

|  |  |  |  |
| --- | --- | --- | --- |
| a. | if light goes out, all lights go out | c. | there are two paths for electrons to follow |
| b. | there is one path for electrons to follow | d. | there is a lot of resistance |

ANS: C PTS: 1

 19. Which of the following descriptions is the correct order of organization of an ecosystem?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Community, biome, population | c. | Population, ecosystem, community |
| b. | Species, population, community | d. | Biome, ecosystem, biosphere |

ANS: B PTS: 1

 20. Different populations of different species living together in a defined area is known as a

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Species | c. | Community |
| b. | Ecosystem | d. | Population |

ANS: C PTS: 1

 21. Which is a biotic factor that affects the size of a population in a specific ecosystem?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Average temperate | c. | Number and kinds of predators |
| b. | Oxygen levels | d. | Type of soil |

ANS: C PTS: 1

 22. Which is an example of how biotic and abiotic factors interacting?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Sun increases temp. of water. | c. | Tree roots split apart rock |
| b. | Humidity forms fog | d. | Water and soil make mud |

 26. What is an SDS?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Safety Data Sheet | c. | Safety Day Sheet |
| b. | Safety Disorder Sheet | d. | Material Safety Data sheet |

ANS: A PTS: 1

 30. Softwood comes from …

|  |  |  |  |
| --- | --- | --- | --- |
| a. | deciduous trees | c. | conifer trees |
| b. | herbaceous trees | d. | Weedy Trees |

ANS: C PTS: 1

 31. Hardwood comes from …

|  |  |  |  |
| --- | --- | --- | --- |
| a. | deciduous trees | c. | weedy trees |
| b. | herbaceous trees | d. | conifer trees |

ANS: A PTS: 1

 32. Balsa is …

|  |  |  |  |
| --- | --- | --- | --- |
| a. | deciduous trees/ hardwood | c. | conifer trees/ softwood |
| b. | conifer trees/ hardwood | d. | deciduous trees/ softwood |

ANS: D PTS: 1

 33. Which is an example of PPE?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Mask | c. | Gloves |
| b. | Gown | d. | All choices are correct |

ANS: D PTS: 1

 34. How many compartments to the stomach does a ruminant animal have

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

ANS: A PTS: 1

 38. What three elements do plants obtain from the atmosphere?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Carbon Dioxide, Boron, Sodium | c. | Carbon, Hydrogen, Oxygen |
| b. | Carbon Dioxide, Boron, Sodium | d. | Hydrogen, Copper, Zinc |

ANS: C PTS: 1

 39. What is needed in the greatest amount by plants for maximum growth?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Water | c. | Micronutrients |
| b. | Macronutrients | d. | Vitamins |

ANS: B PTS: 1

 40. What nutrients are usually lacking in the soil?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Nitrogen, Phosphorus, Potassium | c. | Nitrogen, Oxygen, Zinc |
| b. | Sodium, Potassium, Hydrogen | d. | Iron, Cobalt, Copper |

ANS: A PTS: 1

 41. Which plant parts are the tubes that carry water throughout the plant?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | xylem | c. | phloem |
| b. | roots | d. | leaves |

ANS: A PTS: 1

 42. Which plant parts carry sugars and other nutrients throughout the plant?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | phloem | c. | roots |
| b. | xylem | d. | leaves |

ANS: A PTS: 1

 43. Where pollination happens

|  |  |  |  |
| --- | --- | --- | --- |
| a. | anther | c. | stigma |
| b. | ovary | d. | filament |

ANS: C PTS: 1

 44. Where is the pollen produced?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | stigma | c. | style |
| b. | filament | d. | anther |

ANS: D PTS: 1

 45. What is fertilization?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | the process by which the pollen fuses with an ovule | c. | When the pollen is moved from the anther to stigma |
| b. | the process by which the seed is formed | d. | the process by which the pollen fuses with the anther |

ANS: A PTS: 1

 46. Two types of asexual reproduction in plants are

|  |  |  |  |
| --- | --- | --- | --- |
| a. | rhizomes, stolon’s | c. | tubers, flowers |
| b. | bipartition, stolon’s | d. | tubers, seed |

ANS: A PTS: 1

 47. A flowering plant which forms seeds for reproduction

|  |  |  |  |
| --- | --- | --- | --- |
| a. | angiosperm | c. | gymnosperm |
| b. | bryophyte | d. | conifer |

ANS: A PTS: 1

 49. Examples of products that are produced from tropical forests include...

|  |  |  |  |
| --- | --- | --- | --- |
| a. | latex | c. | medicines |
| b. | timber | d. | all of the answers are correct |

ANS: D PTS: 1

 50. A negative ENVIRONMENTAL impact of slash-and-burn agriculture is...

|  |  |  |  |
| --- | --- | --- | --- |
| a. | decreased forest fires | c. | increased biodiversity |
| b. | decrease in job opportunities | d. | increased deforestation |

ANS: D PTS: 1

 53. What gas is TAKEN IN during photosynthesis?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | argon | c. | oxygen |
| b. | nitrogen | d. | carbon dioxide |

ANS: D PTS: 1

 54. What gas is RELEASED during photosynthesis?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | carbon dioxide | c. | oxygen |
| b. | argon | d. | nitrogen |

ANS: C PTS: 1

 55. What is transpiration?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Excess water being released from the leave | c. | Excess sugar being released from the leave |
| b. | The way a plant makes its food | d. | When the plant uses sugar for energy |

ANS: A PTS: 1

 56. The pH scale is a range from:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1-7 | c. | 0-14 |
| b. | 1-5 | d. | 1-14 |

ANS: C PTS: 1

 57. A(n) \_\_\_\_\_\_ is a substance with a pH less than 7

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Acid | c. | Alkaline |
| b. | Base | d. | Neutral |

ANS: A PTS: 1

 58. Complete the sentence.

A substance that is more basic has a \_\_\_\_\_ pH than a substance that is acidic.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | lower | c. | higher |
| b. | the same | d. | none of the above |

ANS: C PTS: 1

 59. A pH of 3 is how many times more acidic than a pH of 5?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 2 | c. | 20 |
| b. | 10 | d. | 100 |

ANS: D PTS: 1

 60. What should always be worn while welding to protect eyes from arc flash?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | PAPR hood | c. | sunglasses |
| b. | Welding hood | d. | bee keeping suit |

ANS: B PTS: 1

 61. The best way to start your engine maintenance program is to:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | pour gasoline in a tank | c. | check the oil level |
| b. | read the owner's manual | d. | clean the engine |

ANS: B PTS: 1

 62. Before doing any work on small gasoline engines:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | always remove and ground the spark plug wire | c. | drain the oil |
| b. | always remove the spark plug wire | d. | check the oil level |

ANS: A PTS: 1

 63. Where should gas and oil saturated rags be stored?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | upstairs | c. | in a plastic container |
| b. | in an approved container designed for storing flammable waste | d. | in a container that seals shut |

ANS: B PTS: 1

 67. Supervised horticultural/agricultural experience (SAE) programs provide a method in horticultural education for students to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | all choices are correct | c. | explore and identify interests |
| b. | make money | d. | receive real-world experience |

ANS: A PTS: 1

 68. A comprehensive agricultural program includes which three components?

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

ANS: C PTS: 1

 69. Which is an example of an exploratory SAE?

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

ANS: D PTS: 1

 73. The gas obtained from the air needed by plants to make food.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Oxygen | c. | Nitrogen |
| b. | Carbon dioxide | d. | Helium |

ANS: B PTS: 1

 74. Where are the National FFA Headquarters?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Indianapolis, IN | c. | Kansas City, MO |
| b. | Alexandria, VA | d. | Washington, DC |

ANS: A PTS: 1

 75. The FFA Mission refers to all of the following EXCEPT

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Career Success | c. | Premier Leadership |
| b. | Personal Growth | d. | Community Service |

ANS: D PTS: 1

 76. In the National FFA Organization, what do the letters SAE stand for?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Super Awesome Event | c. | Supervised Agricultural Experience |
| b. | Serious Animal Evaluation | d. | Sophisticated Agricultural Equipment |

ANS: C PTS: 1

 77. There are four types of SAEs. Which is NOT one of the four types of SAEs?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Exploratory | c. | Entrepreneurship |
| b. | Placement | d. | Improvement |

ANS: D PTS: 1

 78. In what year was the organization's name changed?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1988 | c. | 1948 |
| b. | 2008 | d. | 1998 |

ANS: A PTS: 1

 79. What year did the NFA merge with the FFA?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | 1957 | c. | 1965 |
| b. | 1973 | d. | 1981 |

ANS: C PTS: 1

 80. In the National FFA Organization, what do the letters CDE stand for?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Competition Designed for Excellence | c. | Career Development Event |
| b. | Chapter Development Event | d. | Chapter's Doing and Exceeding |

ANS: C PTS: 1

 81. What is WLC?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Washington Leadership Conference | c. | Winners & Losers Caring |
| b. | Winning Leadership Convention | d. | Washington Life Conference |

ANS: A PTS: 1

 82. First plants to grow naturally in a burned/cleared area are called \_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Softwoods | c. | Pioneers |
| b. | Hardwoods | d. | Succession |

ANS: C PTS: 1

 83. Management of forests and their environments for commercial production and harvest is called \_\_

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Reforestation | c. | Forest Regeneration |
| b. | Silviculture | d. | Horticulture |

ANS: B PTS: 1

 84. The \_\_\_ is a cell structure containing materials capable of capturing energy from the sun

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Protoplasm | c. | Cytoplasm |
| b. | Chloroplast | d. | Vacuole |

ANS: B PTS: 1

 85. Which of the following is a primary consumer?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Great Horned Owl | c. | Whitetail Deer |
| b. | Canada Lynx | d. | Bobcat |

ANS: C PTS: 1

 86. Hardwoods are \_\_ in density than softwood due to the amount of cell wall material in a given volume.

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Lesser | c. | None of the answers are correct |
| b. | Identical | d. | Higher |

ANS: D PTS: 1

 87. Which statement is true about carrying a chainsaw?

|  |  |
| --- | --- |
| a. | Engine stopped, break engaged, guide bar/chain to the front |
| b. | Engine stop, guide bar/chain to rear, muffler away from body |
| c. | Engine stop, brake on, guide bar to rear, muffler away body |
| d. | All of these are correct |

ANS: C PTS: 1

 88. Electricity that is produced using harvested plant materials as fuel to produce heat is called

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Induced Power | c. | Nuclear Power |
| b. | Biomass Power | d. | Hydropower |

ANS: B PTS: 1

 89. Forests are

|  |  |  |  |
| --- | --- | --- | --- |
| a. | always renewable | c. | renewable if managed properly |
| b. | always nonrenewable | d. | nonrenewable after deforestation |

ANS: C PTS: 1

 90. Fossil fuels are \_\_\_\_\_\_\_\_\_\_\_\_ resources

|  |  |  |  |
| --- | --- | --- | --- |
| a. | renewable | c. | renewable if managed properly |
| b. | nonrenewable | d. | new |

ANS: B PTS: 1

 91. Which is not necessary for a seed to germinate

|  |  |  |  |
| --- | --- | --- | --- |
| a. | water | c. | soil |
| b. | air | d. | warmth |

ANS: C PTS: 1

 92. Which part of a seed stores and supplies energy during dormancy?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Flower | c. | Embryo |
| b. | Seed Coat | d. | Cotyledon |

ANS: D PTS: 1

 93. Which part of the seed is a protective layer?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | The embryo | c. | The cotyledon |
| b. | The seed jacket | d. | The seed coat |

ANS: D PTS: 1

 94. The first structure to come out of the seed is

|  |  |  |  |
| --- | --- | --- | --- |
| a. | The Cotyledon | c. | The Embryo |
| b. | The Root | d. | The Stem |

ANS: B PTS: 1

 95. A major reason for the manipulation of genes using recombinant DNA technology is to:

|  |  |
| --- | --- |
| a. | increase the use of pesticides in agriculture. |
| b. | eradicate plant and animal species. |
| c. | improve plant and animal performance. |
| d. | monitor the effects of inbreeding. |

ANS: C PTS: 1

 96. Which is a product of genetic engineering related to weed control?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Roundup-ready soybeans | c. | Bt corn |
| b. | High-oleic peanuts | d. | Delayed-ripening tomatoes |

ANS: A PTS: 1

 97. In agriscience as well as other sciences, the method used to solve a problem is called the:

|  |  |  |  |
| --- | --- | --- | --- |
| a. | educated-guess method. | c. | engineering method |
| b. | process of elimination. | d. | scientific method. |

ANS: D PTS: 1

 98. Which process developed in the 1980s involves moving genetic information between genes?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Genetic engineering | c. | Bioremediation |
| b. | Biostimulation | d. | Phytoremediation |

ANS: A PTS: 1

 99. What does GPS stand for?

|  |  |  |  |
| --- | --- | --- | --- |
| a. | Guidance Personal System | c. | Global Positioning System |
| b. | Going Persistent Systems | d. | Global Personal System |

ANS: C PTS: 1

 100. Sensor that measures the characteristics of a field without contacting anything

|  |  |  |  |
| --- | --- | --- | --- |
| a. | on the go sensor | c. | spatial resolution |
| b. | remote sensing | d. | yield monitor |

ANS: B PTS: 1