1. Which order of soil is formed from volcanic ash?

A: gelisol

B: spodosol

C: oxisol

D: andisol

2. Which federal law provided land grants for the development of agricultural education?

A: George-Barden Act

B: Smith-Hughes Act

C: Morrill Act

D: Vocational Education Act

3. What is the effect of a high-fiber diet on a dairy goat?

A: more milk is produced

B: milk becomes creamy

C: less milk is produced

D: milk goes sour

4. What is the term for the number of small particles of fat in a piece of lean meat?

A: maturity

B: texture

C: marbling

D: leanness

5. What is the name of the process by which nitrogen evaporates from a plant and enters the atmosphere?

A: volatilization

B: atmospheric fixation

C: plant uptake

D: biological fixation

6. Which of the following best describes the long-term trend in employment in occupations related to agriculture in United States?

1. Jobs on farms are decreasing
2. Jobs in food processing are decreasing
3. Jobs in ornamental horticulture are decreasing
4. Jobs in agriculture service occupations are decreasing

7. A farmer buys a new tractor for $40,000 and expects to use it for 20 years, after which the tractor will have a salvage value of $10,000. What is the straight-line depreciation that can be taken for the first year of ownership?

1. $1,500
2. $1,667
3. $2,000
4. $2,250

8. The demand for which of the following products is likely to be the most elastic?

1. Milk
2. Bread
3. Salt
4. Pork

9. Which of the following concepts in Robert’s Rules of Order requires that motions be dealt with in order of importance?

1. Order of business
2. Orders of the day
3. Order of precedence
4. Point of order

10. The primary purpose of a supervised agricultural experience (SAE) program is to

1. Provide a basis for students to apply for and win proficiency awards
2. Provide students with income to be used to earn money management skills
3. Give students a chance to earn enough money to qualify for local, state, and national FFA degrees
4. Allow students to apply skills learned in the classroom and learn new skills in a specialized area

11. Which of the following most likely indicates the presence of water in the hydraulic system in a piece of farm machinery?

1. A grayish, milky fluid
2. Excessive fluid use
3. Excessive thinning of the fluid
4. A noisy relief valve

12. Which of the following is a disorder in ruminants characterized by an excessive accumulation of gas in the rumen?

1. Agalactia
2. Bloat
3. Bovine pleuropneumonia
4. Grass tetany

13. Which of the following set of components are the Agricultural Education 3- circle model?

A. The FFA motto, the FFA creed, and the FFA jacket

B. Classroom instruction, supervised agricultural experience, FFA

C. Animal Science, Plant Science, Ag Business, speaking

D. National FFA, State FFA Association, local FFA chapters

14. Which organization is responsible for the content standards of agricultural education?

A. The Council

B. National FFA Organization

C. OPI

D. The government

15. Where is the OPI office located?

A. Louisville, KY

B. Indianapolis, IN

C. Bozeman, MT

D. Helena, MT

16. Which of the following is **not** a program in place to promote agricultural education?

A. The STAR program

B. Tagged to Teach Ag

C. The Agricultural Education Support Forum

D. none of the above

17. Who of the following is not a member of the Division of Agricultural Education at MSU?

A. Dr. Carl Igo

B. Dr. Dustin Perry

C. Dr. Shannon Arnold

D. Dr. Anton Bekkerman

18. How many licks does it take to the center of a tootsie pop?

A. A triple dozen

B. The world may never know

C. A whole flock

D. 7 times 77

19. What is Perkins funding?

A) A professional term for the money we might use to eat at Perkins

B) The money that the state grants only to FFA

C) A principal source of federal funding to state CTE programs

D) It was

20. What is differentiation?

A. The act of tailoring instruction to each students’ need.

B. Utilizing different lesson plans each year

C. Acting in a way that engages students to the objectives

D. all of the above

21. The purpose of lesson objectives are to:

A. Guide and organize the lesson

B. Match content standards

C. Avoid meaningless and random instruction

D. All of the above

22. If the permeability of subsoil is rapid, the subsoil texture is most likely classified as

1. Coarse
2. Medium
3. Fine
4. Silty

23. The loss of water in the form of vapor from plants is referred to as

1. Transpiration
2. Respiration
3. Oxidation
4. Condensation

 24. Which of the following best describes an effect of the Green Revolution in the 1960s?

1. Increase in the varieties of each crop planted
2. Increased use of fertilizers
3. Decreased use of mechanization
4. Decreased use of pesticides

25. How many duck ponds are at MSU?

A. 117

B. At least 2 fiddy

C. More than 0

D. None

Bonus: Which of the following is the best power hand tool and the best position for cutting a 14 inch by 8 foot long strip from a 4 foot by 8 foot of ¾ inch A/C plywood?

1. Portable jigsaw, A side up
2. Portable jigsaw, C side up
3. Portable circular saw, A side up
4. Portable circular saw, C side up

Answers

1. D. Andisol soils contain a great deal of glass.
2. C. The Morrill Act was passed in 1862.
3. B. Fiber tends to increase the amount of butterfat in goat’s milk.
4. C. A high degree of marbling indicates a piece of meat will be juicy.
5. A. Heat causes volatilization.

6. A. There is a national trend of fewer workers employed in jobs on the farm.

7. A. The tractor’s value will drop by $30,000 (from $40,000 to $10,000) over 20 years. The annual loss in value (depreciation) thus averages $1500/year.

8. D. Of the products listed, only pork has several substitutes that consumers can buy if the price of pork becomes too high.

9. C. Robert’s Rules of Order state that motions must be taken in order of priority or precedence. Order of business is the usual agenda that an organization will follow in conducting its meetings. Orders of the day is a privileged motion used when the agenda is not being followed. Point of order is an incidental motion used to stop incorrect actions and to insist on the enforcement of parliamentary rules.

10. D. Learning through applying acquired skills while acquiring new skills in a specialized area is the primary purpose of SAE programs.

11. A. A grayish, milky fluid is indicative of water in the hydraulic system.

12. B. Bloat is the visible distention of the belly in ruminants due to excess buildup of gases in the rumen.

13. B. <http://montanaffa.org/agricultural-education/>

14. A. <https://www.ffa.org/thecouncil>

15. D. The OPI office for Montana is in the capitol city.

16. C. <http://www.naae.org/teachag/>

17. D. <http://ageducation.montana.edu/facultystaff.html> Dr. Bekkerman is an economics professor.

18. B. <https://www.youtube.com/watch?v=O6rHeD5x2tI>

19. C. The Carl D. Perkins Career and Technical Education Act of 2006 is the major source of funding to states for career and technical education programs.

20. A. Differentiation is illustrated by designing lessons based on students’ learning styles, assessing and adjusting lesson content to meet students’ needs, and grouping students by shared interest or ability for assignments.

21. D. All are a purpose of lesson objectives.

22. A. Permeability refers to the ability of air and water to pass through the subsoil. Coarse-textured soils have larger particles (sand) and larger spaces between the particles that facilitate the passage of water and air. The smaller particles characteristic of soils with medium and fine textures provide more of a barrier to air and water movement.

23. A. Transpiration is the release of water vapor from living plants.

24. B. The Green Revolution was characterized by increased crop production as a result of the use of specific varieties of crops, fertilizers, and pesticides. Mechanization increased in order to deliver the fertilizers and pesticides, and a few specific varieties of crop plants replaced the larger number of varieties that had been previously planted.

25. C. There’s one well-known duck pond on campus.

Bonus: D. The portable circular saw is the best power tool for a job requiring a straight cut. Since the blade teeth move up through the wood, the lower-quality C side of the plywood should be the upper surface in order to avoid splinter damage to the more valuable A side.