



**2016 National FFA Livestock Evaluation
Career Development Event – Exam Key**

1. A key tool to help develop rations is called the _____. (P170)
 - a. Punnet Square
 - b. Parson Square
 - c. Pearson Square**
 - d. Ration Square

2. The _____ goat originated in the Eastern Cape Province of South Africa and is noted for being superior to Spanish goats for meat production. (P528-529)
 - a. Bore
 - b. Boar
 - c. Baer
 - d. Boer**

3. Vitamins D and E are examples of _____. (P133)
 - a. Water Soluble Vitamins
 - b. Fat Soluble Vitamins**
 - c. Trace Vitamins
 - d. Macro Vitamins

4. In order from least to most complex, structures in animals include: (P105)
 - a. Systems-Organs-Tissues-Cells
 - b. Cells-Tissues-Organs-Systems**
 - c. Tissues-Cells-Systems-Organs
 - d. There is no difference in these terms or structures.

5. Modern *Bos Taurus* are descended from the Celtic Shorthorn and the _____. (P5)
 - a. Auroch**
 - b. *Bos Indicus*
 - c. Galloway
 - d. Markours

6. A _____ ration is one that has all necessary nutrients in the correct proportions and amounts. (P159)
- Nutritious
 - Balanced**
 - Palatable
 - Perfect
7. All vertebrate farm animals have an _____. (P 107)
- Hydraulic skeleton
 - Endoskeleton**
 - Exoskeleton
 - Epithelial skeleton
8. The primary energy nutrient in animal rations is/are _____. (P131)
- Protein
 - Minerals
 - Amines
 - Carbohydrates**
9. Thought to be linked to a recessive gene, _____ is most prevalent in heavily muscled pigs and can be reduced through the selection of breeding stock. (P463)
- PSS**
 - SPS
 - SSP
 - PPsV
10. Skeletal muscles typically attach to bones by _____. (P110)
- Tendons**
 - Ligaments
 - Osseins
 - Smooth Muscles
11. Maintenance rations provide energy for the functioning of the heart, breathing, and other vital processes. These activities are referred to as _____. (P161)
- Baseline Metabolism
 - Diaphoretic Metabolism
 - Critical Metabolism
 - Basal Metabolism**

12. In ruminants the true (gastric) stomach is called the _____. (P124)
- Abomasum**
 - Rumen
 - Omasum
 - Reticulum
13. _____ is a synthetic source of Nitrogen that can help meet the amino acid requirements of ruminants. (P133)
- Alenine
 - Glycine
 - Uric Acid
 - Urea**
14. An example of a Water Soluble Vitamin would be _____. (P133)
- Vitamin A
 - Alpha Tocopherol
 - Vitamin K
 - Vitamin C**
15. In the mammalian circulatory system, blood returns to the heart via the anterior and posterior vena cava and enters the _____ first. (P114)
- Left Atrium
 - Right Atrium**
 - Left Ventricle
 - Right Ventricle
16. _____ have the highest energy value. (P132)
- Carbohydrates
 - Minerals
 - Fats**
 - Proteins
17. The use of antimicrobial drugs at a lower dosage than would be used for sick animals is referred to as _____. (P140)
- Subclinical
 - Subtherapeutic**
 - Nutrient Sparing
 - Anthelmintics

18. Livestock feeds that have greater than _____ % crude fiber are called roughages and those with less are called concentrates. (P 158)
- 12.5
 - 14
 - 16
 - 18**
19. All quadrupedal (four legged) farm animals are part of the class _____. (P10)
- Aves
 - Chordata
 - Suidae
 - Mammalia**
20. _____ carry an important function in society because they are best suited to convert large quantities of roughages not consumable by humans into food for human consumption. (P 11)
- Non-Ruminants
 - Ruminants**
 - Pseudo-Ruminants
 - Avians
21. Bovine Spongiform Encephalopathy is very similar to _____ in sheep and goats. (P336)
- BRSV
 - Scrapie**
 - Spider Lamb Syndrome
 - Creutzfeldt-Jakob Disease
22. Rapid fermentation caused by overfeeding of legumes and other feeds is the primary cause of bloat in _____. (P351, 555)
- Ruminants**
 - Non-Ruminants
 - Pseudo-Ruminants
 - Non-Ungulates

23. A common animal protein supplement is _____, made from dried and ground tissues and bones from slaughterhouses. (P 158)

- a. **Tankage**
- b. Truckage
- c. Shrinkage
- d. Pupilage

24. The average normal temperature for swine is _____ °F. (P 447)

- a. 101.5
- b. 102.0
- c. **102.6**
- d. 103.6

25. _____ refers to breaking down feedstuffs into smaller (simpler) substances and _____ refers to taking those substances into the bloodstream. (P117)

- a. **Digestion :: Absorption**
- b. Absorption :: Digestion
- c. Digestion :: Mastication
- d. Mastication :: Deglutition