(10)1. Growth is affected by animal gender. What is the difference between animal growth of Bulls, Heifers, and Steers: Rams, Ewes, and Wethers; Boars, Sow (Gilts), and Barrows.

Bulls typically mature faster than Steers which mature faster than Heifers. The pattern of Intact male, castrated male, female continues mostly through all the species. So Rams mature sooner than Wethers, which mature sooner than Ewes. In pigs, however, Boars mature first, but Gilts mature sooner than Barrows, though not by a large margin.

(10)2. How is gender of the carcass determined in lambs? Part two, how is maturity of the carcass determined. Part three, List the maturity classes for lamb carcasses and give approximate ages.

Gender is determined by looking at the fat below the hind legs on the carcass (cod fat). Ewes have a large smooth patch of fat. It is usually smaller in area that Ewes and rougher in texture, while Rams have a fairly small amount of fat in the cod area. Maturity is determined by looking at the epiphysial/diaphysial plate on the femur. A break in that area indicates a younger sheep (maturity A) then a sheep with the diaphysial line (maturity B)

\[ M = 5 - 14 \text{ months} \quad L = 15 - 24 \text{ months} \]

(10)3. The four Primal cuts of lamb are? Part two, what factors make up the yield grade for lamb and what is the formula for yield grades. Part three, define yield grade.

Primal cuts: Leg, loin, rack, shoulder

Yield grade is affected by the amount of fat present either on the bone or surrounding the bone. The yield grade is then rated on the 10th rib.

\[ \text{Yield Grade} = \frac{1}{2}(1 + \text{fat thickness}) \]

Yield Grade: the amount of bone that needs to be removed from a particular cut.
(15)4. In evaluating breeding sheep describe five things to evaluate when considering your top choice. The book lists seven. Part two, which is the most important and why. Part three, which is the least important today and why.

1) Leg conformation - solid/past legged/cow-hocked etc.
2) Capacity - amount of area/uterus/crop - length width depth
3) Mouth soundness - ability of the teeth to wear, the mouthed
4) Levelness - does the udder slope or remain level across?
5) Wool fineness/staple length - characteristics of the wool

The most important factor would be dependent on where the animal was going to be placed. In a pasture situation, the leg conformation would be most important because the sheep would have to travel to find feed. On a farm, the mouth soundness would be more important as it is what enables the sheep to eat and digest food. For near breeds, the wool would be the least important factor as the sheep is not bred for its wool.

(5)5. What is the ranges and averages for the following items in market lambs:

a. Dressing Percentage 44 - 52%
   Ave: 50%

b. Fat thickness (12th rib)
   0.05 - 1 in.
   Ave: 0.25 in.

c. Market weight
   40 - 200 lbs
   Ave: 125 lbs

d. Ribeye area
   1 - 4 in.
   Ave: 2.5 in.

e. Kidney, pelvic, and heart fat (watch your answer here)
   (remove at slaughter and score raw meat (not carcass evaluation))
   Ave: 13%

40 x 2 = 92

**RESERVED**

Vanderwell