2012 Block and Bridle FFA Meats Judging Contest
Meat Formulation Problem

50 points, 30 Minutes

BE SURE TO USE A #2 PENCIL AND FILL IN CORRECT BUBBLES!

USDA REGULATIONS FOR GROUND BEEF:

GROUND BEEF: The terms “Ground Beef” and “Chopped Beef” are synonymous. Products must be made with fresh and/or frozen beef with or without seasoning and without the addition of fat as such and shall contain no more than 30% fat. It may contain beef cheek not to exceed 25%. It may contain added water, binders or extenders. Heart and tongue meat are not acceptable as ingredients. The Technical Requirements Schedule (TRS) – GB 2007 requires potential contracts to designate, in their technical proposal, a laboratory to conduct microbiological testing of boneless beef.

Assume that you are a production supervisor at a large meat processing company. You have won the bid to make “Hokie Beef”. The following are company policies that must be followed to make “Hokie Beef”.

1. All fresh products must be stored at a temperature not exceeding 34°F.
2. No variety meat may be used.
3. No products over 4 days old may be used.
4. The finished product must be made of all beef.
5. The least cost shall be determined and performed on acceptable ingredients to select the lowest cost combination of products which meet all ground beef guidelines.

You have received an order for “Hokie Beef” with the following order specifications;
- The desired fat content of the finished product is 14%
- The batch size is 3300 pounds
- It will be manufactured and processed on March 29, 2012.
<table>
<thead>
<tr>
<th>Material</th>
<th>Slaughter Date</th>
<th>Temperature °F</th>
<th>Fat Content %</th>
<th>Price ($ per pound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bull Meat</td>
<td>March 30, 2012</td>
<td>33 F</td>
<td>13%</td>
<td>$0.50</td>
</tr>
<tr>
<td>50 % Lean Trim</td>
<td>March 27, 2012</td>
<td>32 F</td>
<td>25%</td>
<td>$2.00</td>
</tr>
<tr>
<td>Pulled Pork Meat</td>
<td>March 28, 2012</td>
<td>32 F</td>
<td>50%</td>
<td>$1.70</td>
</tr>
<tr>
<td>Beef Chuck</td>
<td>March 20, 2012</td>
<td>32 F</td>
<td>24%</td>
<td>$0.95</td>
</tr>
<tr>
<td>90 % Lean Trim</td>
<td>March 24, 2012</td>
<td>33 F</td>
<td>15%</td>
<td>$2.50</td>
</tr>
<tr>
<td>Beef Tongue</td>
<td>March 28, 2012</td>
<td>30 F</td>
<td>30%</td>
<td>$0.35</td>
</tr>
<tr>
<td>Beef Sirloin</td>
<td>March 26, 2012</td>
<td>32 F</td>
<td>16%</td>
<td>$1.80</td>
</tr>
<tr>
<td>70 % Lean Trim</td>
<td>March 25, 2012</td>
<td>33 F</td>
<td>32%</td>
<td>$1.50</td>
</tr>
</tbody>
</table>

Please select the correct combination and fill it in on the appropriate spot on your score sheet.

01. Bull Meat and 70% Lean Trim at $0.55/lb
02. Beef Sirloin and 50% Lean Trim at $1.85/lb
03. Pulled Pork and 90% Lean Trim at $2.48/lb
04. 50% Lean Trim and Bull Meat at $0.62/lb
05. 70% Lean Trim and Beef Chuck at $1.15/lb
06. Beef Tongue and Bull Meat at $0.47/lb
07. Beef Sirloin and 70% Lean Trim at $1.77/lb
08. 50% Lean Trim and 70% Lean Trim at $1.81
09. Beef Chuck and 90% Lean Trim at $2.36/lb
10. Beef Sirloin and Pulled Pork at $1.80/lb

Please select the best answer for each question. Bubble the answer in on your scantron.

____ 1. Which ingredients did not meet company freshness requirements?
   a. 70% Pork Trim  
   b. Beef Tongue  
   c. 90% Lean Trim  
   d. None of the above

____ 2. How many pounds of 90% lean meat are in the finished batch?
   a. 1254 lbs  
   b. 0 lbs  
   c. 330 lbs  
   d. 2046 lbs

____ 3. How many pounds of the final product are made from Beef Sirloin?
   a. 330 lbs  
   b. 495 lbs  
   c. 2970 lbs  
   d. 0 lbs

____ 4. How many pounds of the final product are made from Bull Meat?
   a. 0 lbs  
   b. 2970 lbs  
   c. 3102 lbs  
   d. 495 lbs

____ 5. Which available meat cannot be legal ground beef by itself?
   a. Beef Chuck  
   b. 90% Lean Trim  
   c. Beef Tongue  
   d. Beef Sirloin