## I. SOIL PROPERTIES (5 points each, 45 total)

### A. PARENT MATERIAL
1. Weathered bedrock
2. Till
3. Outwash/Lacustrine deposits
4. Eolian sand
5. Loess
6. Alluvium
7. Local overwash

### B. SLOPE
1. 0-2%
2. 3-6%
3. 7-12%
4. 13-18%
5. 19-25%
6. 26-35%
7. >35%

### C. LANDFORM
1. Upland hillslope
2. Upland swell
3. Upland flat
4. Upland depression
5. Outwash/Lacustrine hillslope
6. Outwash/Lacustrine swell
7. Outwash/Lacustrine flat
8. Outwash/Lacustrine depression
9. Dune
10. Flood plain
11. Filled depression

### D. SURFACE SOIL COLOR GROUP
1. Gray
2. Brown
3. Black

### E. PREVIOUS EROSION
1. None to slight
2. Moderate
3. Severe

### F. SURFACE TEXTURE
1. Sandy
2. Moderately sandy
3. Medium
4. Moderately clayey
5. Clayey

### G. SUBSOIL TEXTURE
1. Sandy
2. Moderately sandy
3. Medium
4. Moderately clayey
5. Clayey

### H. NATURAL SOIL DRAINAGE
1. Poorly
2. Somewhat poorly
3. Moderately well
4. Well

### I. LIMITING LAYER
1. Bedrock, 0-20 in
2. Bedrock, 21-40 in
3. Dense till, 0-20 in
4. Dense till 21-40 in
5. Fragipan, 0-20 in
6. Fragipan, 21-40 in
7. Coarse sand & gravel, 0-20 in
8. Coarse sand & gravel, 21-40 in
9. None within 40 in

## II. AGRICULTURE PRACTICES (3 points each, 69 total)

### A. LAND USE OVERVIEW
1. Restore original vegetation to:  
   - A – Wetland;  
   - B – Prairie;  
   - C – Mesic forest

### B. EROSION AND COMPACTION POTENTIALS
1. High for erosion by water
2. High for erosion by wind
3. High for soil compaction

### C. BUFFERS AND COVER CROPS
1. Grassed waterways
2. Windbreaks
3. Filter strips
4. Most significant benefit of cover crops:  
   - A - Scavenge N;  
   - B - No need;  
   - C - Erosion control

### D. CROPPING PRACTICES
1. Timber stand improvement (TSI)
2. Permanent pasture
3. Crop rotation

### E. TILLAGE PRACTICES
1. No till
2. Moldboard or chisel plowing

### F. WATER MANAGEMENT
1. Drainage
2. Irrigation
3. Terraces

### G. PLANT NUTRIENT APPLICATION
1. N: Low Med. High
2. P: Add None Deplete
3. K: Add None Deplete
4. Lime: Add None

### H. NUTRIENT POLLUTION POTENTIAL
1. Nitrogen pollution potential:  
   - A – High, groundwater;  
   - B – High, surface water;  
   - C – Med.
2. Phosphorus pollution potential:  
   - A – High;  
   - B – Medium;  
   - C – Low

---

**Team / Contestant number: ____________________**  
**Contestant name: _________________________**  
**School / Club name: _________________________**  
**Site number: _________________________**  

**SCORE**

<table>
<thead>
<tr>
<th>Part I (45 points possible):</th>
<th>Part II (69 points possible):</th>
<th>Total (114 points possible):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>