Site No.\_\_\_\_\_\_\_\_\_\_ School No. \_\_\_\_\_\_\_\_ ccccccccc**LAND-USE SCORECARD (100) points** Student No. \_\_\_\_\_\_\_\_

 (Use the Scantron From for parts I – IV.)

1. **LANDSCAPE CHARACTERISTICS (4 POINTS)**

\_\_\_\_1. PERCENT SLOPE (4 POINTS)

1. 0-2% (Nearly Level) E. 15-20% (Moderately steep)
2. 2-5% (Gently sloping) AB. 20-30% (Steep)
3. 5-10% (Moderately sloping) AC. More than 30% (Very steep)
4. 10-15% (Strongly sloping)
5. **SOIL PROFILE CHARACHTERISTICS (36 points)**

\_\_\_\_\_2. THICKNESS OF PLOW OR SURFACE LAYER, DEGREE OF EROSION & DEPOSITION (4 points)

1. More than 9”, no evidence of subsoil mixing; none to slight erosion
2. 3” to 9”, may have up to 50% subsoil mixing, moderate erosion
3. Less than 3” plow layer may be mostly subsoil; severe erosion
4. 8” to 20” deposition; layer of different color or texture than buried surface soil

 \_\_\_\_\_3. COLOR AND PERCENT OF ORGANIC MATTER IN PLOW (SURFACE) LAYER (4 POINTS)

 Color Ave. % Organic Matter

1. Very dark 5
2. Dark 3 ½
3. Moderately dark 2 ½
4. Light 2
5. Very light 1 ½

 \_\_\_\_\_4. PRESENCE OF GRAYISH E(A2) HORIZON (4 points)

1. Grayish E horizon present
2. Grayish E horizon not present

 \_\_\_\_\_5. SUBSOIL COLOR (4 points)

1. Brown or yellowish brown; no gray mottling
2. Brown or yellowish brown; gray or gray mottling below 24”
3. Gray and brown mottled
4. Gray or love gray; may have a few brown mottles
5. Does not apply

 TEXTURE (4 points each)

 Soil texture group

 \_\_\_\_\_6. PLOW LAYER A. Coarse (loamy sand, sand, also includes gravel and gravelly loam)

 B. Moderately coarse (fine sandy loam and sandy loam)

 \_\_\_\_\_7. SUBSOIL C. Medium (silt loam, loam, silt, very fine sandy loam)

 D. Moderately fine (silty clay loam, clay loam, sandy clay loam)

 \_\_\_\_\_8. SUBSTRATUM E. Fine (clay, silty clay, sandy clay)

 AB. Bedrock (limestone, shale, or sandstone)

 AC. Organic material (peat, muck)

 AD. Horizon not present in exposed profile

 SOIL STRUCTURE (4 points each)

 Type of structure (or particle arrangement)

 \_\_\_\_\_9. PLOW LAYER A. Single grain

 B. Massive

 \_\_\_\_\_10. SUBSOIL C. Granular

 D. Platy

 E. Blocky

 AB. Prismatic or columnar

 AC. Horizon not present in exposed profile

**III. ASSOICATED SOIL FEATURES (20 points)**

 \_\_\_\_\_11. INTERNAL DRAINAGE AND AERATION (4 points)

 A. Well drained

 B. Moderately well drained

 C. Somewhat poorly drained

 D. Poorly and very poorly drained

 E. Does not apply

 \_\_\_\_\_12. SURFACE RUNOFF (4 points)

 A. Rapid

 B. Medium

 C. Slow

 D. Areas subject to ponding

 E. Areas subject to flooding

 \_\_\_\_\_13. PREMEABILITY (ease of water and air movement) (4 points)

 A. Rapid

 B. Moderate

 C. Slow

 \_\_\_\_\_14. SOIL DEPTH (favorable for root growth) (4 points)

 A Deep, more than 36”

 B. Moderately deep, 20-36”

 C. Shallow, less than 20”

 \_\_\_\_\_15. AVAILABLE WATER HOLDING CAPACTIY (4 points)

 A. Very high, more than 12”

 B. High, 9 to 12”

 C. Moderate, 6 to 9”

 D. Low, 3 to 6 “

 E. Very low, less than 3”

**IV. SOIL USE AND MANAGEMENT (40 points)**

SOIL LOSS EQUATION (10 points)

 C value is \_\_\_\_\_\_\_\_\_\_(write this value on scantron in appropriate spot)

 SOIL MANAGEMENT (24 points)

 Mark the maximum amount of tillage that could be used for each rotation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  Rotation  |  Does  Not Apply |  Conventional Tillage | Chisel or LargeDisk Tillage |  Zero Till |
| Fall Plow | Spring Plow | 20%residue | 30%residue | 40%residue | 50%residue | 60% residue | 70% residue | 80%residue |
| 16. Continuous corn | A. |   B..36 |   C..29 |  D..21 |  E..18 |  AB..15 |  AC..12 |  AD..09 |  AE..06 |  BC..05 |
| 17. Corn-Soybeans | A. |  B..36 |  C..31 |   D..27 |   E..23 |  AB..19 |   AC..18 |  AD..09 |  AE..09 |  BC.. |
| 18. Corn-Corn- ccccSoybeans | A. |  B..36 |   C..30 |  D..25 |   E..21 |   AB..18 |  AC..16 |   AD..10 |   AE..08 |  BC..07 |
| 19. Corn-Soybeans- ccccSmall grain | A. |  B..27 |  C..22 |   D..17 |   E..15 |   AB..12 |  AC..10 |   AD..05 |   AE..03 |  BC.. |
| 20. Corn-Sb-Small ccccgrain - meadow | A. |   B..14 |  C..12 |  D..10 |   E..09 |   AB..08 |   AC..08 |   AD..03 |   AE..02 |   BC.. |
| 21. Restricted Use cccPasture, Hayland, cccWoods, Wildlife |   Y  |   N |  |
|  A. |  B. |