NURSERY/LANDSCAPE CDE
LANDSCAPE ESTIMATION PRACTICUM

Answer the following questions using the landscape plan provided. Use your engineer's scale, pencil, and calculator. Please show work. (Look at plan <u>carefully</u> when answering!)

1. Landscape plans often use symbols to refer to various plant species. Using the symbols, determine how many of each of the following species is needed for the **entire** plan.

    A. Dwarf Burford Holly = **11**

    B. 'Natchez' Crape Myrtle = **3**

    C. Japanese Plum Yew = **8**

    *Interpret drawing
    & count symbols

2. The symbols indicate that the two Sasanqua Camellias are to be
    _____.

    A. Espaliered

    B. Topiaries

    C. Hedges

3. How many 15-gallon plants are used in this plan?

    4

4. The single quotation marks around 'Emerald' and 'Natchez' mean they are _____.

    A. Varieties

    B. Cultivars

    C. Evergreens

5. How many square feet of fescue lawn is there in the plan?

    *Read correct scale to measure length & width of fescue area.

    A= 30' x 40' = 1200 sq.ft.

6. If you are going to sow the lawn with fescue seed at a rate of 1 ½ # of seed per 100 sq. ft., how many pounds of seed would you need?

    *Determine quantities of materials for a specific area based on rates of materials.

    1200 sq.ft.   =   12 x 1.5 #seed   =   18 #seed
    100 sq.ft.

7. Suppose Bed A is 750 sq. ft. and Bed B is 750 sq. ft., how many **cubic yards** of pine bark mulch would it take to apply it 3 inches deep to both beds? (Round up to the next cubic yard).

    *Calculate cubic yards.

    Step 1.   750 x 2 = 1500 sq. ft.
    Step 2.   3"   = .25'
    **   12"**
    Step3.   1500 sq.ft x .25' = 375 cu. ft.
    Step4.   375 cu.ft / 27 cu.ft./cu. yd. = 13.88 cu.yd.
    Step 5.   14 cu. yd.

8. If you wanted to put steel edging around the turf area on all sides (omitting the concrete walk), how many linear feet of edging do you need?

*Read scale correctly to measure distances.

30'+30'+40'+40' = 140' – 3' (walk) = 137'

9. How many square feet of ground cover bed is there in the plan?

11' x 33' = 363 sq.ft.

10. How many day lilies are there in the plan?

*Count all symbols, even when not in same location.

10

11. How many 5-gallon plants are there in the plan?

2

12. How many 3-gallon plants are there in the plan?

29

13. What does the symbol ↑ mean?
N

Direction North

14. If each 15-gallon 'Natchez' Crape Myrtle costs $75.00 and it takes two employees 30 minutes to plant one and the pay rate for each employee is $8.00 per hour…..

A. What is the total cost of trees?

*Calculate material costs.

$75.00 x 3 = $225.00

B. What is the total labor cost to plant them?

*Calculate production costs.

3 Trees x .5 hour x 2 employees x $8.00 = $24.00

15. If you charge just the amount calculated in the #14 for installing the 3 Crape Myrtles, how much profit have you made?

None!

16. How many square feet are there in the patio?

20' x 25' = 500 sq.ft.

17. If you want lay pavers in the patio and there are 5 pavers per square foot, how many pavers doe you need?

*Take care not to divide.

500 sq.ft. x 5 pavers/sq.ft. = 2500 pavers

18. If pavers can be installed for $8.00 per square foot, how much do you charge for the installation?

500 sq.ft. x $8.00 = $2000.00

19. If you need a 4" deep compacted sand base under the pavers, how many **cubic yards** of sand do you need? **(Round up to the next ½ cubic yard.)**

Step 1. $\dfrac{4"}{12"}$ = .33'

Step 2. 500 sq.ft. x .33' = 165 cu.ft.

Step 3 $\dfrac{165 \text{ cu.ft.}}{27 \text{ cu.ft./cu. yd.}}$ = 6.11 cu. yd.

Step 4. 6.5 cu.yd.

20. If you can plant four 3-gallon plants in an hour and ten 1-gallon plants in an hour, how long will it take you to plant the 3-gallon and 1-gallon plants in the plan? **(Round up to the nearest whole hour).**

$\dfrac{29}{4}$ (3gal) = 7.25 hours

$\dfrac{10}{10}$ (1gal) = 1 hour

7.25 hr + 1hr = 8.25 hours