

National FFA Nursery/Landscape Career Development Event
Landscape Estimating 2014

This is the landscape plan for an enclosed courtyard for a new apartment complex to be built in downtown Indianapolis. There are 4 pages of the plan attached to help you understand the various plantings and hardscape areas. Pages 1 and 2 of the plans use a $1/8'' = 1'$ scale. Pages 3 and 4 are included for explanation only and are not to scale as shown on the drawings.

Mark all answers carefully and properly on the separate answer sheet.

1. Using the $1/8''$ scale, what are the dimensions of the center firepit?
 - A. 2' square
 - B. 3' square
 - C. 4' square
 - D. 6' square
2. How long is the wall fountain?
 - A. 8' long
 - B. 10' long
 - C. 17' long
 - D. 18' long
3. Looking at Page 2, there are 8 trees shown as GB. These are specified as Ginkgo bilboa. Using the $1/8''$ scale, how large in diameter are the tree circles shown?
 - A. 10'
 - B. 13'
 - C. 14'
 - D. 15'
4. You estimate it will take 3 men $\frac{1}{2}$ an hour to plant each Ginkgo tree and you will charge \$25.00 per hour, how much will your labor price to plant the Ginkgo trees be?
 - A. \$300.00
 - B. \$100.00
 - C. \$275.00
 - D. \$600.00
5. Each Ginkgo tree will cost you \$125.00 plus 10% shipping. Your typical markup for trees including shipping cost is 1.3. How much will you charge for each tree?
 - A. \$162.50
 - B. \$178.75
 - C. \$137.50
 - D. None of the above.

6. The 7 (total) plants shown on each side of the wall fountain are specified as pyramidal evergreens. Which plant listed below best matches this description?
- A. *Betula nigra*
 - B. *Cotoneaster divaricatus*
 - C. *Taxodium distichum*
 - D. *Thuja occidentalis*
7. The plants shown directly in front of the wall fountain are listed as *Ajuga reptans*. The planting bed will be 36 square feet. The specifications require excavation to 18" deep and replacement media costing \$12.00 per 2 cubic feet. How much will the replacement media cost?
- A. \$216.00
 - B. \$432.00
 - C. \$324.00
 - D. \$624.00
8. You estimate it will take 2 guys 45 minutes each to excavate the *Ajuga* planting bed. You charge \$25.00 per hour. How long will this portion of the job take?
- A. \$50.00
 - B. \$37.50
 - C. 1.5 hours
 - D. $\frac{3}{4}$ hour
9. *Ajuga reptans* comes in 1 gallon containers, and cost \$2.50 each. How much is your markup if you charge \$4.25 each?
- A. 2 times
 - B. 1.7 times
 - C. 1.5 times
 - D. None of the above.
10. There are 3 small trees shown in opposite corners of the plan, identified as A. The specifications call for these trees to be small, deciduous trees. Which plant of the list below best matches that description?
- A. *Forsythia x intermedia*
 - B. *Fraxinus Americana*
 - C. *Dieffenbachia maculate*
 - D. *Cornus florida*
11. How many plants are shown with the same symbol as B?
- A. 22
 - B. 8
 - C. 11
 - D. 21

12. Plants shown as B will need to have hardwood mulch applied to the size of the circle shown on the plan and to a depth of 3". How much mulch will it take for one plant?
- A. 2.1 cubic feet
 - B. 3 cubic feet
 - C. 3.14 cubic feet
 - D. 2 cubic feet
13. The trees shown on Page 2 as AP are to have tree wrap to first limbs, and to be staked and guyed. Your estimates for materials and labor for this work are as follows:
- * Tree wrap material - \$1.30 per tree
 - * Tree wrap labor – 5 minutes per tree at \$25.00 per hour
 - * Guying materials - \$2.50 per tree
 - * Guying labor – 15 minutes per tree at \$25.00 per hour
- What is your total estimate for wrapping and guying these trees?
- A. \$66.50
 - B. \$32.00
 - C. \$30.40
 - D. \$96.90
14. There are 46 total plants shown as C. These are specified as a purple flowering perennial. What plant listed below matches this description?
- A. Echinace purpurea
 - B. Juniperus chinensis
 - C. Buxus microphylla
 - D. Tulipa spp.
15. The area labeled entrance path is to be laid with limestone pavers. Using the 1/8" scale, what are the dimensions of the path as outlined?
- A. 4' wide x 12' long
 - B. 6' wide x 8' long
 - C. 3' wide x 10' long
 - D. None of the above
16. Limestone pavers cost \$4.00 per 1' square and \$8.00 per 1' x 2'. How much will your cost in pavers be based on the outlines shown?
- A. \$144.00
 - B. \$48.00
 - C. \$192.00
 - D. \$176.00

17. Your labor estimate to lay limestone pavers is \$25.00 per square foot. How much will you charge to lay the pavers for the area labeled as the Entrance Path?
- A. \$480.00
 - B. \$1200.00
 - C. \$1600.00
 - D. \$1800.00
17. How many plants are identified as item D?
- A. 3
 - B. 5
 - C. 6
 - D. 8
18. Item D is specified as a small, evergreen shrub. Which of the following plants best fits that description?
- A. *Acer rubrum*
 - B. *Aquilegia x hybrida*
 - C. *Buxus microphylla*
 - D. None of the above.
19. Your total cost for the plant material, not including installation labor is \$21,297.00. You intend to mark up your costs on plant material 1.3 times and add a 10% replacement factor. How much will you charge for the plant material?
- A. \$25,345.71
 - B. \$32,567.12
 - C. \$30,454.71
 - D. \$41,878.32
20. You estimate 4 guys will be needed for a total of 6 – 8 hour days to install this work. You expect to charge \$30.00 per hour for installation. How much will your labor price be?
- A. \$5760.00
 - B. \$7200.00
 - C. \$3200.00
 - D. None of the above.