



NURSERY/LANDSCAPE CAREER DEVELOPMENT EVENT

LANDSCAPE ESTIMATING - 2022

Please read all questions carefully and properly mark your answers on the separate scan sheet.

This is a landscape plan for a renovated courtyard for a local hospital in downtown Indianapolis, Ind. All questions are based on the plan.

1. How many entrances are shown on the plan?
 - A. 3
 - B. 2
 - C. 4
 - D. None of the above

2. The tree circles indicated on the plan and shown as A in the plant symbols key show tree canopies of how many feet in diameter?
 - A. 10'
 - B. 7'
 - C. 12'
 - D. 13'

3. The client would like to use a smaller deciduous tree with seasonal interest for the key marked as A. What tree of those listed below would be the closest match for this use?
 - A. *Syringa vulgaris* cv.
 - B. *Acer platanoides* cv.
 - C. *Cercis canadensis*
 - D. *Solenostemon scutellarioides*

4. The tree selected for A is specified as a 2" caliper and will have a 24" root ball. You plan to excavate a planting opening of 3' wide and 3' deep. You calculate it will take your workers 1 hour to excavate each of the tree holes and will be charging \$48.00 per hour for this part of the work. How much will this labor charge be for all the trees shown as A?
- A. \$48.00
 - B. \$192.00
 - C. \$144.00
 - D. None of the above
5. Each tree shown as A will cost you \$179.00 plus 10% shipping. You plan to use a 1.5 mark-up of your tree costs. How much will you be charging for the retail price of these trees?
- A. \$1074.00
 - B. \$1181.40
 - C. \$295.35
 - D. \$1080.35
6. There are plants identified as C according to the plant symbols key. These are specified as *Buxus microphylla* cv. You buy these as 3-gallon plants. They will cost \$21.35 each for quantities of 1-9 or \$19.65 each for quantities of 10-24, and you plan to mark them up 1.5. How much will you charge for the purchase of these plants?
- A. \$416.35
 - B. \$255.45
 - C. \$365.25
 - D. None of the above
7. Several plants shown on the plan are marked as B. These are described as small evergreen shrubs. Which of the following plants best suit this description?
- A. *Camellia japonica* cv.
 - B. *Forsythia x intermedia* cv.
 - C. *Taxus spp.* and cv.
 - D. *Nandina domestica*

8. Plants labeled as B will be purchased as 5-gallon plants 24"/H. They will cost \$37.50 less a 10% quantity discount. You will mark them up 50%. What will be your retail price for all the plants marked as B?
- A. \$1063.15
 - B. \$911.25
 - C. \$1237.50
 - D. \$1113.75
9. You estimate it will take half an hour per plant for placing, digging, and planting each of the plants marked as B. You will charge \$48.00 per hour for this work. How much will your labor charge for planting all plants labeled as B?
- A. \$528.00
 - B. \$1056.00
 - C. \$504.00
 - D. \$432.00
10. There are two existing planter boxes shown on the plan. These have an interior depth the same as each interior side measurement. How much soil will be needed to replace the existing soil with all new for each planter?
- A. 10 cubic feet
 - B. 16 cubic feet
 - C. 8 cubic feet
 - D. None of the above
11. You plan to do a four seasons planting scheme for the 2 planter boxes. You will plant pansies in the spring, annual blooming plants for summer, mums in the fall and low-growing junipers for winter. Each container's total plant cost for the year will be \$101.50. Using a 1.7 mark-up, how much will you charge for the plants to fill both containers?
- A. \$172.55
 - B. \$203.00
 - C. \$355.15
 - D. \$345.10

12. The plants shown as G are specified as Astilbe and are available in 1 gal. containers. They will cost \$7.30 each plus a 10% shipping fee. You will use a 1.7 mark-up for the purchase price. Labor to plant all items labeled as G will cost \$21.82, and your labor mark-up is 2.2. How much will you charge for the purchase of the plants marked as G?
- A. \$307.40
 - B. \$259.40
 - C. \$355.40
 - D. \$305.15
13. The piano key benches each come in four sections and cost \$1,195.00 per section. Shipping will be an additional 8%. You estimate it will take 2 people $\frac{1}{2}$ a day each to assemble and install the benches. Your retail labor rate is \$48.00 per hour. Using a 20% mark-up for the benches, how much will you charge for the purchase and installation of the piano key benches?
- A. \$13,457.99
 - B. \$9,567.35
 - C. \$12,773.80
 - D. \$12,389.76
14. Your client is expecting mulch to cover all the planting areas to a depth of two inches in the courtyard. Your mulch comes in 2 cubic foot bags, and you expect your labor to take 10 minutes per bag to load, unload and spread. How many hours will you need to count for the mulch installation in the planting area next to the entrance on the south side of the plan?
- A. 23.12 hours
 - B. 3.87 hours
 - C. 8.67 hours
 - D. 7.74 hours
15. What is the square footage of the planting bed shown on the west side of the plan? Please include the existing planter box and the small area under the bench.
- A. 506.50 Sq. Ft.
 - B. 420 Sq. Ft.
 - C. 511.50 Sq. Ft.
 - D. 485.10 Sq. Ft.

16. The plants labeled as E come in 3-gallon containers and will cost \$15.50 plus 10% shipping each. You will use a 1.7 mark-up on your cost. How much will the plants marked as E cost you delivered?
- A. \$306.90
 - B. \$289.85
 - C. \$255.75
 - D. \$521.75
17. How wide is the opening of the smallest entrance?
- A. 8.5 ft.
 - B. 7 ft.
 - C. 6 ft.
 - D. None of the above
18. There are *Pachysandra terminalis* shown to be planted in the lowest tier of the existing fountain. They will cost \$7.30 each. Your mark-up will be 1.7. How much will you charge for the purchase of these plants?
- A. \$1,051.00
 - B. \$1,008.00
 - C. \$735.85
 - D. \$1,787.00
19. The planting bed on the east side of the plan has a ventilation grate indicated. This area, other than the grate, under the bench and under the existing planter box will need mulch to a depth of two inches. You will use 2 cu. ft. bags of mulch costing \$2.50 each with a 1.5 mark-up. Your guys spread 6 bags of mulch per hour, and you charge \$48.00 per hour. How much will you charge for the purchase of this mulch and installation?
- A. \$397.35
 - B. \$458.25
 - C. \$146.25
 - D. None of the above

20. There are tables and chairs shown on the plan and illustrated as Park Center Table and 21 Chair. The tables cost \$860.00 each, and the chairs are \$480.00 each plus 8% shipping for both. You plan to mark these items up 30%. There is some assembly required, which you estimate will take 15 minutes per item. Using your labor rate of \$48.00 per hour, how much will you charge for purchasing and assembling the tables and chairs?

- A. \$9,187.20
- B. \$11,710.00
- C. \$11,889.40
- D. \$12,156.35