

National FFA Nursery/Landscape Career Development Event

Landscape Estimating 2016

This is a partial floor plan for an addition to an existing hotel in Indianapolis, Indiana. There will be questions regarding the interior plantings as well as the surrounding exterior beds.

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

1. Using your scale, what is the dimension of the double door opening leading into the interior space?
 - A. 3.5'
 - B. 7'
 - C. 6'
 - D. None of the above.

2. How many trees, indicated with the circle and labeled as A, are shown in the exterior planting bed around the building perimeter?
 - A. 15 trees
 - B. 13 trees
 - C. 6 trees
 - D. 9 trees

3. The exterior trees, labeled as A, are to be a pyramidal evergreen. Which tree of the following list would be the best choice?
 - A. *Juniperus horizontalis*
 - B. *Cercis canadensis*
 - C. *Yucca filamentosa*
 - D. *Thuja occidentalis*

4. How far apart are the exterior trees labeled as A, on the east side of the building, to be planted?
 - A. 7'
 - B. 10'
 - C. 12'
 - D. 13'

5. The interior plantings are to include trees, labeled as B and specified to be 12'/H out of ground. Which of the following plants will work for this application?

- A. *Syringa vulgaris*
- B. *Ficus benjamina*
- C. *Fagus sylvatica*
- D. *Cercis canadensis*

6. How wide is the interior planting bed?

- A. 6'
- B. 5'
- C. 4'
- D. None of the above.

7. The interior planting bed will need to be excavated to a depth of 3 feet and re-filled with soil as specified by the architect. How many bags of soil containing 2 cubic feet will be needed to fill the planting beds?

- A. 1584 bags
- B. 1593 bags
- C. 797 bags
- D. 997 bags

8. How far apart are the interior trees along the longer window wall and labeled as B, shown to be planted?

- A. 10'
- B. 6'
- C. 8'
- D. 12'

9. How much per tree will shipping costs be for an interior tree 12'H in 24" diameter growing containers and sleeved to a diameter of 24", if shipping is \$1.75 per cubic foot?
- A. \$36.75
 - B. \$84.00
 - C. \$64.31
 - D. \$175.00
10. Assuming it will take 2 guys half an hour each to plant each tree and you charge \$35.00 per hour. How much will you charge to plant each tree?
- A. \$35.00
 - B. \$70.00
 - C. \$52.50
 - D. \$65.00
11. There will be ground cover planted around and in front of the interior trees. Which of the following plants will work well as interior ground cover plantings?
- A. *Aquilegia x hybrid*
 - B. *Buxus microphylla*
 - C. *Pachysandra terminalis*
 - D. None of the above
12. If each tree has a root ball of 3.14 square feet, how many square feet (to the nearest square foot) will be needed as ground cover plantings for the remaining area?
- A. 25.12 square feet
 - B. 531 square feet
 - C. 506 square feet
 - D. 417 square feet

13. Each ground cover plant will be delivered in a box of 6 each, costing \$48.00 with shipping per box. You plan to mark your cost of ground cover plants 2.3 times. How much will you charge your client per ground cover plant?

- A. \$18.40
- B. \$110.40
- C. \$32.00
- D. \$20.00

14. You estimate it will take 408 ground cover plants to fill in around the trees. If one of your installation crew can install 6 plants in 15 minutes, and you are planning to charge \$35.00 per hour, how much will you charge your client for the ground cover plant installation?

- A. \$2380.00
- B. \$595.00
- C. \$840.00
- D. None of the above

15. The exterior plan shows a triangular shaped bed marked as D, planned for annual color plantings. You plan to use plants costing \$7.00 per square foot and will mark up the plant cost 2.3 times. How much will you charge for these plants?

- A. \$1925.00
- B. \$4427.50
- C. \$962.50
- D. \$3477.60

16. The plan calls for bark mulch to cover the exterior planting beds. You plan to use enough mulch for a 3" depth. How many cubic feet of mulch will be needed for the planting bed labeled as C?

- A. 31.1 cubic feet of mulch
- B. 35 cubic feet of mulch
- C. 105 cubic feet of mulch
- D. 34.65 cubic feet of mulch

17. It will take your installers 3 hours to plant each exterior tree. The trees will cost \$65.00 each. If you charge \$35.00 per hour and mark up each tree 1.5 times, how much will you charge for each tree and labor to plant it?

- A. \$132.50
- B. \$170.00
- C. \$202.50
- D. \$215.50

18. The client would like to have a color rotation program in the interior planting beds. You plan to change the blooming plants out 16 times per year so they are seasonally fresh. Each plant will cost \$8.00 including shipping and you use a 2.5 mark up to include some additional maintenance. How much will you charge for each pot per month?

- A. \$20.63
- B. \$27.50
- C. \$11.00
- D. \$26.67

19. What is the square foot measurement of the concrete pad at the emergency exit between the exterior planting beds?

- A. 10 square feet
- B. 20 square feet
- C. 9 square feet
- D. 12 square feet

20. You estimate it will take 4 man hours for the interior plant maintenance and you plan to schedule your visits every other week. If you charge \$36.00 per hour and your contract will be for one year, how much will your monthly labor charge be?

- A. \$312.00
- B. \$288.00
- C. \$624.00
- D. None of the above