

NURSERY-LANDSCAPE

Participants in the Nursery/Landscape Career Development Event (CDE) tests students skills in maintaining landscape plants and related products, evaluating equipment and services and performing landscape design.

RULES AND REGULATIONS

1. The score of the 3 high individuals will be used to determine the team score.
2. Students or attending schools must provide their own # 2 pencils, clip boards and non-programmable calculator.
3. All reference to plants will come from the "Oregon Nursery Plant Identification List".
4. The CDE will consist of four sections. The sections are:
 - Identification of Plant Material, Tools and Pest / Disorders.
 - General Knowledge Test
 - Practicum
 - Team Activity
5. The group leader will initial the correct response on the student's marks on the scorecard if a change is necessary.
6. Contestants may not handle any CDE specimens or plant material.
7. The location or nursery from which plants for the plant identification will be used require a 30 Day site quarantine.

SECTION I - IDENTIFICATION OF NURSERY MATERIALS

A. Plant Identification. 50 Plants @ 5 points = 250 Points.

Fifty specimens from the "Oregon Nursery Plant Identification List" will be displayed for contestants to identify by technical and common names. Each specimen will be designated by a number and be alive and growing or removed from growing tissue the day of the CDE.

When contestants have identified the plant specimen, the respective number from the plant list is to be marked on the score card. Each contestant will be provided with a copy of the plant list at the CDE. Five points will be awarded for each specimen correctly identified. Each contestant will be allowed 50 minutes to complete this phase of the CDE.

No plant may be touched or handled in any way.

B. Tool Identification: 10 Tools @ 5 points = 50 Points.

Ten common nursery and landscape tools selected from the "Oregon Nursery Tool Identification List".

When contestants have identified each tool, the respective number from the tool list is to be marked on the score card. Each contestant will be provided with a copy of the tool list at the CDE. Five points will be awarded for each tool correctly identified.

No tools may be touched or handled in any way.

C. Pest and Disorders Identification: 10 Specimen @ 5 points = 50 Points.

Ten Pest and Disorders common in nursery and landscape selected from the "Oregon Nursery Pest and Disorders Identification List".

When contestants have identified each Pest and or Disorder, the respective number from the Pest and Disorders

list is to be marked on the score card. Each contestant will be provided with a copy of the Pest and Disorder list at the CDE. Five points will be awarded for each specimens correctly identified.

No specimen may be touched or handled in any way.

Tool, Pest & Disorders Identification

1. aerifier
2. anvil blade pruner
3. architect's scale
4. bow saw
5. brick paver
6. broadcast spreader
7. burlap
8. compressed air sprayer
9. dust mask
10. edger
11. edging material
12. engineers scale
13. erosion netting
14. fertilizer tablet
15. galvanized pipe
16. garden rake
17. grafting band
18. granular fertilizer
19. gravity drop spreader
20. hedge shears
21. hoe
22. hose-end repair rifting coupler
23. hose-end washer
24. impulse sprinkler
25. leaf rake
26. Loppers
27. mattock
28. mist nozzle
29. landscape fabric
30. nursery spade
31. oscillating sprinkler
32. pole pruner
33. polyethylene film
34. PVC pipe
35. post-hole digger
36. power blower
37. pruning saw
38. reel mower
39. resin-coated fertilizer
40. respirator
41. rotary mower
42. rototiller
43. round point shovel
44. scoop shovel
45. shade fabric
46. sharpening stone
47. siphon proportioner
48. soaker hose
49. soil auger
50. soil sampling tube
51. solenoid valve
52. square/flat shovel
53. string trimmer
54. thatch rake
55. time clock
56. tree caliper measuring device
57. tree wrap
58. trowel
59. T-square
60. waterbreaker

SECTION II - GENERAL KNOWLEDGE (250 points per student)

50 Questions @ 5 points = 250 Points.

Fifty objective multiple-choice questions will be prepared on topics reflecting subject areas in the CDE objectives. All questions will come from the last three years of national tests. This CDE phase will evaluate the contestant's knowledge and understanding of basic horticultural principles in producing, marketing, landscaping principles, using and maintaining nursery plants and turf. Contestants are allowed 50 minutes to complete this phase. Each answer has a value of five points. All questions in regards plants and plant material will be plants that are listed on the "Oregon Nursery Plant Identification List". All questions in regards to specific pest and tools will be items listed on the "Oregon Nursery Pest Identification List" and "Oregon Nursery Tool Identification List" respectively.

SECTION II - PRACTICUM (200 points per student)

A. LANDSCAPE DRAWING: 10 Questions = 100 Points

This Practicum section is designed to evaluate contestant knowledge of any ability in the following areas;

Evaluating a landscape design

Reading a landscape drawing

Measuring and calculating materials needed to execute a landscape plan

Evaluating factors that affect profitability of a landscape business.

There will be 10 questions with four listed answers each. Contestant will select the best answer for each question. A landscape drawing and scratch paper will be provided to the participants. The questions may include such area as determining how the form and size of specified for a certain plant, the cost of fencing, the number of patio pavers required, the area of sod to be installed, the volume of mulch required and the labor cost to install a ground cover bed. In regards to the practicum questions no more than one question can use the same or common questions\answer. So only one question can build upon a previous question. IE: Needing a correct answer on question # 1 to get a correct answer on question # 2.

B. PROBLEM SOLVING 10 Question = 100 Points

A problem solving activity of 10 questions. These questions will be selected from the interpersonal relations such as verbal or written customer assistance, nursery practices such as propagation, letter writing, equipment maintenance, detecting and troubleshooting problems. For more detail refer to the National Career Development Event Manual Phases IV - VII.

SECTION II - TEAM ACTIVITY (200 points)

200 Team Points

This Practicum involves all members of the team working together toward accomplishing a team assignment. It is designed to evaluate individual and group contribution in coordination and cooperation of knowledge, evaluation and decision making. The team activity has two parts, described below.

Team Preparation 15 minutes - The team member's work as a group in evaluation of one or more landscape drawings provided, as in the following examples:

A landscape plan either new or renovated is provided that includes, planting plan, hardscape, patio and etc.

Students will;

Develop an irrigation system.

Establish landscape maintenance plan.

Each of the components will be evaluated and are to be described verbally.

One or two landscape plans of the same property will be provided for evaluation in order to make a verbal comparative description and recommendation on which plan is preferred by the team.

The team will have 15 Minutes for preparation. Blank paper will be provided for making any desired notes. A judge will be observing and scoring during this time but not interacting with the team. If needed, the team may ask the judge basic questions about the plan, drawings or assignment. All material needed will be provided.

Team Presentation 10 minutes - Each of the team members will share the allotted time in making a verbal presentation to a judge, based on decisions made during preparation. It is up to the team to determine how the allotted time is to be shared. The 10 minutes should be shared evenly. For the examples above this might be

conducted as follows.

Each team member separately described one of the plan components (Plants, irrigation or maintenance).

Positive and negative qualities of Plan A are described by a team member, repeated for Plan B by another, and team recommendation provided by another team member.

The team will have 10 Minutes to share for individual presentation, interaction with the judge and each other. Division of the time and organization of the presentation is at the team's discretion. The judge may ask questions of the presenter or other team members during this time. While this practicum emphasizes teamwork and description of the landscape plans without an Ag sales component, it may be beneficial to consider the judge as a landscape business client.

Refer to the Team Activity Score Card.

OREGON NURSERY/LANDSCAPE PESTS AND DISORDER IDENTIFICATION

DISEASES

- 101 Anthracnose
- 102 Apple Scab
- 103 Black Spot
- 104 Botrytis
- 105 Brown Rot/Blossom Blight
- 106 Canker
- 107 Crown Gall
- 108 Fire Blight
- 109 Powdery Mildew
- 110 Red Thread
- 111 Root Rot
- 112 Shot Hole Fungus

- 146 Lantain
- 147 Prostrate Knotweed
- 148 Purslane
- 149 Quackgrass
- 150 Thistle

PESTS

- 113 Aphid
- 114 Borer
- 115 Cut Worms
- 116 Leaf Hopper
- 117 Leaf Miner
- 118 Mealybug / Adelgids
- 119 Mole / Rodents
- 120 Nematodes / Damage
- 121 Root Weevil
- 122 Scale
- 123 Slug
- 124 Snail
- 125 Spider Mite
- 126 Whitefly

Physiological Problems

- 127 Frost / Freeze / Leaf Scorch
- 128 Chemical Injury
- 129 Cultural Injury
- 130 Iron Deficiency
- 131 Mower Injury
- 132 Nitrogen Deficiency

Weeds

- 133 Annual Bluegrass
- 134 Chickweed
- 135 Clover
- 136 Crabgrass
- 137 Dandelion
- 138 Dock
- 139 Fireweed
- 140 Groundsel
- 141 Henbit
- 142 Morning Glory
- 143 Nutsedge
- 144 Oxalis
- 145 Pigweed

OREGON NURSERY LANDSCAPE PLANT IDENTIFICATION LIST

#	BOTANICAL NAME / COMMON NAME	#	BOTANICAL NAME / COMMON NAME
101	<u>Abelia x grandiflora</u> / Glossy Abelia	157	<u>Magnolia grandiflora</u> / Southern Magnolia
102	<u>Acer circinatum</u> / Vine Maple	158	<u>Magnolia soulangiana</u> cv. / Chinese (Saucer) Magnolia
103	<u>Acer palmatum</u> cv. / Japanese Maple	159	<u>Magnolia stellata</u> / Star Magnolia
104	<u>Acer platanoides</u> cv. / Norway Maple	160	<u>Mahonia aquifolium</u> cv. / Oregon Grape
105	<u>Acer rubrum</u> cv. / Red Maple	161	<u>Mahonia nervosa</u> / Longleaf Mahonia
106	<u>Ajuga reptans</u> cv. / Carpet Bugle	162	<u>Malus species</u> cv. / Flowering Crabapple
107	<u>Aquilegia x hybrida</u> cv. / Columbine	163	<u>Nandina domestica</u> / Heavenly Bamboo
108	<u>Arctostaphylos uva-ursi</u> / Bearberry, Kinnikinnick	164	<u>Narcissus pseudo-narcissus</u> / Daffodil
109	<u>Astilbe hybrid</u> cv. / Astilbe	165	<u>Pachysandra terminalis</u> / Japanese Spurge
110	<u>Berberis thunbergii</u> cv. / Japanese Barberry	166	<u>Paeonia hybrid</u> cv. / Peony
111	<u>Betula pendula</u> cv. / White Birch	167	<u>Parthenocisus tricuspidata</u> / Boston Ivy
112	<u>Buxus sempervirens</u> / Common Boxwood	168	<u>Photinia fraseri</u> / Fraser Photinia
113	<u>Calluna vulgaris</u> cv. / Heather	169	<u>Picea abies</u> 'Nidiformis' / Birds Nest Spruce
114	<u>Camellia japonica</u> cv. / Camellia	170	<u>Picea abies</u> all cv. / Norway Spruce
115	<u>Cedrus atlantica</u> 'Glauca' cv. / Blue Atlas Cedar	171	<u>Picea glauca</u> 'Conica' / Alberta Spruce
116	<u>Cedrus deodara</u> c.v. / Deodar Cedar	172	<u>Picea pungens</u> cv. / Colorado (Blue) Spruce
117	<u>Cercis canadensis</u> cv. / Redbud	173	<u>Pieris japonica</u> / Lily of the Valley Shrub, Japanese Andromeda
118	<u>Chamaecyparis obtusa</u> cv. / Hinoki Cypress	174	<u>Pinus strobus</u> cv. / Eastern White Pine
119	<u>Chrysanthemum x superbum</u> cv. / Shasta Daisy	175	<u>Pinus thunbergiana</u> / Japanese Black Pine
120	<u>Clematis</u> all cv./ Clematis	176	<u>Platanus x acerifolia</u> / London Planetree
121	<u>Cornus florida</u> cv. / Flowering Dogwood	177	<u>Platyclusus orientalis</u> cv. / Oriental Arborvitae
122	<u>Cornus stolonifera</u> cv. / Red Osier Dogwood	178	<u>Poa praetensis</u> cv. / Kentucky Bluegrass
123	<u>Cotoneaster dammeri</u> / Dammeri Cotoneaster	179	<u>Polystichum munitum</u> / Sword Fern
124	<u>Crataegus phaenopyrum</u> / Washington Hawthorn	180	<u>Potentilla fruticosa</u> cv. / Shrubby Cinquefoil, Potentilla
125	<u>Daphne odora</u> / Winter Daphne	181	<u>Prunus cerasifera</u> cv. / Flowering Plum
126	<u>Euonymus alatus</u> / Winged Euonymus	182	<u>Prunus laurocerasus</u> / English Laurel
127	<u>Euonymus fortunei</u> cv. / Wintercreeper	183	<u>Prunus laurocerasus</u> 'Otto Luyken' / Otto Luyken Laurel
128	<u>Fagus sylvatica</u> cv. / European Beech	185	<u>Prunus serrulata</u> cv. / Japanese Flowering Cherry
129	<u>Fatsia japonica</u> / Japanese Aralia	186	<u>Pseudotsuga menziesii</u> / Douglas Fir
130	<u>Festuca</u> cv. / Fescue	187	<u>Pyracantha coccinea</u> / Firethorn
131	<u>Forsythia x intermedia</u> cv. / Border Forsythia	188	<u>Pyrus calleryana</u> / Callery Pear (Flowering Pear)
132	<u>Fraxinus americana</u> cv. / White Ash	189	<u>Quercus palustris</u> / Pin Oak
133	<u>Gaultheria shallon</u> / Salal	190	<u>Quercus rubra</u> / Red Oak
134	<u>Ginkgo biloba</u> / Ginkgo, Maidenhair Tree	191	<u>Rhododendron hybrid</u> / Exbury (Deciduous) Azalea
135	<u>Gleditsia tricanthos inermis</u> cv. / Thornless Honeylocust	192	<u>Rhododendron species</u> / Evergreen Azalea
136	<u>Hedera helix</u> cv. / English Ivy	193	<u>Rhododendron species</u> / Rhododendron
137	<u>Hemerocallis species</u> cv. / Daylily	194	<u>Rosa x</u> cv. / Hybrid Tea Rose
138	<u>Hosta species</u> / Hosta, Plantain Lily	195	<u>Skimmia japonica</u> / Japanese Skimmia
139	<u>Hydrangea macrophylla</u> cv. / Big Leaf Hydrangea	196	<u>Sorbus aucuparia</u> / European Mountain Ash
140	<u>Hypericum calycinum</u> / St. Johnswort	197	<u>Spiraea species</u> cv. / Spiraea
141	<u>Ilex aquifolium</u> cv. / English Holly	198	<u>Syringa vulgaris</u> cv. / Lilac
142	<u>Ilex cornuta</u> / Chinese Holly	199	<u>Taxus cuspidata</u> / Upright Japanese Yew
143	<u>Ilex crenata</u> cv. / Japanese Holly	200	<u>Taxus x media</u> cv. / Anglojap (Hick's Yew)
144	<u>Ilex opaca</u> / American Holly	201	<u>Thuja occidentalis</u> cv. / American Arborvitae
145	<u>Iris species</u> all cv. / Iris	202	<u>Tilia cordata</u> cv. / Little-Leaf Linden
146	<u>Juniperus chinensis</u> cv. / Chinese Juniper	203	<u>Tsuga canadensis</u> / Canadian Hemlock
147	<u>Juniperus horizontalis</u> cv. / Creeping Juniper	204	<u>Tulipa</u> cv. / Tulip
148	<u>Juniperus virginiana</u> 'Skyrocket' / Skyrocket Juniper	205	<u>Viburnum x burkwoodii</u> / Burkwood Viburnum
149	<u>Kalmia latifolia</u> / Mountain Laurel	206	<u>Viburnum davidii</u> / David Viburnum
150	<u>Laburnum watereri</u> / Goldenchain Tree	207	<u>Vinca minor</u> / Periwinkle
151	<u>Lagerstroemia indica</u> cv. / Crape Myrtle	208	<u>Wisteria sinensis</u> / Chinese Wisteria
152	<u>Ligustrum japonicum</u> cv. / Japanese Privet	209	<u>Yucca filamentosa</u> / Adam's Needle, Yucca
153	<u>Liquidambar styraciflua</u> / Sweet Gum		
154	<u>Liriodendron tulipifera</u> / Tulip Tree		
155	<u>Lolium perrene</u> / Perennial Ryegrass		
156	<u>Lonicera japonica</u> 'Halliana' / Japanese Honeysuckle		

OREGON NURSERY / LANDSCAPE SCORING

Section #	Activity	Individual Points	Top Three Scores	Team Points
Section I	Identification			
	A - Plants	250	X 3 = 750	750
	B - Tools	50	X 3 = 150	150
	C - Pest and Disorders	50	X 3 = 150	150
Section II	General Knowledge Test	250	X 3 = 750	750
SECTION N II	Practicum			
	A - Landscape	100	X 3 = 300	300
	Drawing	100	X 3 = 300	300
	B - Problem Solving			
SECTION N II	Team Activity			200
	Total	800		2600

Contestant Name _____

Contestant Number _____

Chapter _____

Oregon State FFA Nursery Contest

Tool Identification – Answer Sheet

1 _____ 5 _____ 9 _____
2 _____ 6 _____ 10 _____
3 _____ 7 _____
4 _____ 8 _____

1. aerifier	21. hoe	41. rotary mower
2. anvil blade pruner	22. hose-end repair rifting coupler	42. rototiller
3. architect's scale	23. hose-end washer	43. round point shovel
4. bow saw	24. impulse sprinkler	44. scoop shovel
5. brick paver	25. leaf rake	45. shade fabric
6. broadcast spreader	26. Toppers	46. sharpening stone
7. burlap	27. mattock	47. siphon proportioner
8. compressed air sprayer	28. mist nozzle	48. soaker hose
9. dust mask	29. landscape fabric	49. soil auger
10. edger	30. nursery spade	50. soil sampling tube
11. edging material	31. oscillating sprinkler	51. solenoid valve
12. engineers scale	32. pole pruner	52. square/flat shovel
13. erosion netting	33. polyethylene film	53. string trimmer
14. fertilizer tablet	34. PVC pipe	54. thatch rake
15. galvanized pipe	35. post-hole digger	55. time clock
16. garden rake	36. power blower	56. tree caliper measuring device
17. grafting band	37. pruning saw	57. tree wrap
18. granular fertilizer	38. reel mower	58. trowel
19. gravity drop spreader	39. resin-coated fertilizer	59. T-square
20. hedge shears	40. respirator	60. waterbreaker

Contestant Name _____

Chapter _____

Oregon State FFA Nursery Contest

Plant Identification – Answer Sheet

Please indicate your answer on the blank next to the appropriate number.

1	_____	18	_____	35	_____
2	_____	19	_____	36	_____
3	_____	20	_____	37	_____
4	_____	21	_____	38	_____
5	_____	22	_____	39	_____
6	_____	23	_____	40	_____
7	_____	24	_____	41	_____
8	_____	25	_____	42	_____
9	_____	26	_____	43	_____
10	_____	27	_____	44	_____
11	_____	28	_____	45	_____
12	_____	29	_____	46	_____
13	_____	30	_____	47	_____
14	_____	31	_____	48	_____
15	_____	32	_____	49	_____
16	_____	33	_____	50	_____
17	_____	34	_____		

Contestant Name _____

Contestant Number _____

Chapter _____

Oregon State FFA Nursery Contest

Diseases, Pests Disorders Identification – Answer Sheet

1 _____	5 _____	9 _____
2 _____	6 _____	10 _____
3 _____	7 _____	
4 _____	8 _____	

Diseases	Pests	Physiological Problems	Weeds
101 Anthracnose	113 Aphid	127 Frost / Freeze / Leaf Scorch	133 Annual Bluegrass
102 Apple Scab	114 Borer	128 Chemical Injury	134 Chickweed
103 Black Spot	115 Cut Worms	129 Cultural Injury	135 Clover
104 Botrytis	116 Leaf Hopper	130 Iron Deficiency	136 Crabgrass
105 Brown Rot/Blossom Blight	117 Leaf Miner	131 Mower Injury	137 Dandelion
106 Canker	118 Mealybug / Adelgids	132 Nitrogen Deficiency	138 Dock
107 Crown Gall	119 Mole / Rodents		139 Firewood
108 Fire Blight	120 Nematodes / Damage		140 Groundsel
109 Powdery Mildew	121 Root Weevil		141 Henbit
110 Red Thread	122 Scale		142 Morning Glory
111 Root Rot	123 Slug		143 Nutsedge
112 Shot Hole Fungus	124 Snail		144 Oxalis
	125 Spider Mite		145 Pigweed
	126 Whitefly		146 Lantain
			147 Prostrate Knotweed
			148 Purslane
			149 Quackgrass
			150 Thistle

Oregon State FFA Nursery Contest**Knowledge Exam – Answer Sheet**

Please indicate your answer on the blank next to the appropriate number.

1	_____	18	_____	35	_____
2	_____	19	_____	36	_____
3	_____	20	_____	37	_____
4	_____	21	_____	38	_____
5	_____	22	_____	39	_____
6	_____	23	_____	40	_____
7	_____	24	_____	41	_____
8	_____	25	_____	42	_____
9	_____	26	_____	43	_____
10	_____	27	_____	44	_____
11	_____	28	_____	45	_____
12	_____	29	_____	46	_____
13	_____	30	_____	47	_____
14	_____	31	_____	48	_____
15	_____	32	_____	49	_____
16	_____	33	_____	50	_____
17	_____	34	_____		

Oregon State FFA Nursery Contest
Landscape Drawing – Answer Sheet

Contestant Name _____ Team _____

1	_____	5	_____	9	_____
2	_____	6	_____	10	_____
3	_____	7	_____		
4	_____	8	_____		

Oregon State FFA Nursery Contest
Landscape Drawing – Answer Sheet

Contestant Name _____ Team _____

1	_____	5	_____	9	_____
2	_____	6	_____	10	_____
3	_____	7	_____		
4	_____	8	_____		

Oregon State FFA Nursery Contest

Problem Solving – Answer Sheet

Contestant Name _____ Team _____

1	_____	5	_____	9	_____
2	_____	6	_____	10	_____
3	_____	7	_____		
4	_____	8	_____		

Oregon State FFA Nursery Contest

Problem Solving – Answer Sheet

Contestant Name _____ Team _____

1	_____	5	_____	9	_____
2	_____	6	_____	10	_____
3	_____	7	_____		
4	_____	8	_____		

Oregon FFA Nursery/Landscape CDE

Team Activity Scorecard

TEAM _____

Preparation

Team leadership roles established / evident	10	
Project assignment and goal defined	10	
Member responsibilities outlined and defined	10	
Members effective in individual tasks	20	
Members supportive of each other	20	
Members interact in a positive/constructive manner	20	
Agreement reached on individual evaluations	10	
Presentation plan developed (who does what / when)	10	
<i>Sub-total</i>	110	

Presentation

Positive voice, grammar, eye contact	10	
Effective organization of information	10	
Communication of information	10	
Demonstrates knowledge of subject	10	
Effective team interaction during presentations	10	
Appropriate participation from each team member	10	
Effective total team presentation	20	
Team assignment fulfilled	10	
<i>Sub-total</i>	90	

<i>TOTAL TEAM POINTS</i>	200	
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