

PSI Services LLC 3210 E Tropicana Las Vegas, NV 89121 www.psiexams.com The contraction to the statistic to the

# **CANDIDATE INFORMATION BULLETIN**

## OREGON LANDSCAPE CONSTRUCTION PROFESSIONAL EXAMINATION AND OWNER/MANAGING EMPLOYEE EXAMINATION

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Be sure to review this entire Candidate Information Bulletin for complete information about the scheduling, testing and licensing processes. Please refer to our website to check for the most updated information at www.psiexams.com.

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## **EXAMINATIONS BY PSI**

This Candidate Information Bulletin provides you with information about the examination and application process for a Landscape Construction Professional licensee in the State of Oregon and the Owner/Managing Employee Examination.

The Landscape Contractors Board (Board) has contracted with PSI Services LLC (PSI) to conduct the examination programs. PSI provides examinations through a network of computer examination centers in Oregon. PSI works closely with the Board to be certain that examinations meet requirements in basic principles and examination development standards.

## HOW TO OBTAIN A LANDSCAPE CONSTRUCTION PROFESSIONAL LICENSE

1. The fastest method to obtain the license application is to download it at <u>www.lcb.state.or.us</u>, otherwise request a landscape construction professional license application from:

#### Landscape Contractors Board 2111 Front Street NE Ste 2-101 Salem, OR 97301 (503) 967-6291 Fax: (503) 967-6298 <u>www.lcb.state.or.us</u> Email: LCBinfo@lcb.state.or.us

- 2. Complete the application and return it to the Board.
- 3. When your application has been approved by the Board, you will be sent a letter of qualification with instructions for scheduling the examination. Note: if you do not test on any sections within 2 years, you must re-apply with the board.

### TYPES OF LICENSES

There are four (4) types of landscape construction professional licenses currently offered:

- All Phases plus Backflow all aspects of landscaping work including irrigation and backflow installation.
- Standard all aspects of landscaping work except irrigation and backflow.
- Irrigation plus Backflow irrigation and backflow only.
- Probationary All Phase plus Backflow all aspects of landscaping work including irrigation and backflow installation but with restrictions (see below).

The applicant must pass all the sections of the exam within one year of the first sitting of the exam. After 24 months of being licensed and meeting the probationary requirements (ORS 671.571) the licensee may request the probation be removed.

#### **EXAMINATION SECTIONS**

The exam sections for the landscape construction professional license are:

- Laws, Rules and Business Practice
- Plants and Turf
- Landscape Construction
- Grading and Drainage
- Safety, Estimating, Soils and Chemicals
- Irrigation
- Backflow

## REQUIRED SECTIONS TO BE PASSED TO OBTAIN A LANDSCAPE CONTRUCTION PROFESSIONAL LICENSE

All Phase - Laws, Rules and Business Practices, Plants and Turf, Landscape Construction, Grading and Drainage, Safety, Estimating, Soils and Chemicals, Irrigation and Backflow (7 Sections)

Standard - - Laws, Rules and Business Practices, Plants and Turf, Landscape Construction, Grading and Drainage, Safety, Estimating, Soils and Chemicals (5 sections)

Irrigation Only - Laws, Rules and Business Practices, Irrigation and Backflow (3 sections)

Probationary - Laws, Rules and Business Practices, Plants and Turf, Landscape Construction, Grading and Drainage, Safety, Estimating, Soils and Chemicals, Irrigation and Backflow (7 Sections)

## HOW TO APPLY FOR THE OWNER/MANAGING EMPLOYEE EXAMINATION

- 1. When you have completed the required 16 hour course from an approved course provider you must submit an application form and proof of completion of this course to the Board.
- 2. Download or request the application form from:

Landscape Contractors Board 2111 Front Street NE Ste 2-101 Salem, OR 97301 (503) 967-6291 Fax: (503) 967-6298 <u>www.lcb.state.or.us</u> Email: <u>LCBinfo@lcb.state.or.us</u>

- 3. Complete the form and return it to the Board.
- 4. When your application has been approved by the Board you will be sent a letter of qualification to sit for the examination with instructions for scheduling the examination.

The required section to be passed for the Owner/Managing Employee is Laws, Rules and Business Practice.



## EXAMINATION REGISTRATION PAYMENT AND SCHEDULING PROCEDURES

## Examination fees can be found on the registration form at the end of this Candidate Information Bulletin.

## INTERNET REGISTRATION

For the fastest and most convenient test scheduling process, PSI recommends that candidates register for their examinations using the Internet. In order to register over the Internet, candidates will need to have a valid MasterCard or Visa. Candidates register online by accessing PSI's registration website at <u>www.psiexams.com</u>. Internet registration is available 24 hours a day.

Upon completion of the online registration form, candidates will be given available exam dates and locations for scheduling examinations.

#### **TELEPHONE REGISTRATION**

Candidates may also schedule via telephone with PSI's Interactive Voice Response system (IVR) during non-business hours or through live registrars during business hours. For telephone registration, candidates will need a valid Visa or MasterCard.

Complete the Examination Registration Form, including a credit card number and expiration date, so that you will be prepared and have all of the information needed to register by telephone.

Call (800) 733-9267, 24 hours a day. PSI registrars are available Monday through Friday, between 4:30 am and 5:00 pm and Saturday, between 8:00 am and 2:00 pm, Pacific Time.

## FAX REGISTRATION

In order to fax registrations, you will need a valid Visa or MasterCard.

Complete the Examination Registration Form, including your credit card number and expiration date.

Fax the completed form to PSI at (702) 932-2666. Faxed registrations are accepted 24 hours a day. If your information is incomplete or incorrect, it will be returned for correction.

Please allow three business days to process your Registration. After three business days, you may call PSI to schedule the examination, (800) 733-9267.

## **REGISTRATION VIA MAIL**

For those desiring to make payment for their examination using **cashiers' checks** or **money orders**, or for those that simply do not wish to provide credit card information over the phone or Internet, you may use the Standard Mail Registration. In order to register, please follow the steps below.

Complete the PSI Registration Form. Payment of applicable fees can be made by money order or cashier's check made payable to PSI. Print your name on your cashier's check or money order to ensure that your fees are properly assigned. CASH, COMPANY CHECKS and PERSONAL CHECKS ARE NOT ACCEPTED.

#### PSI Services LLC 3210 E Tropicana Las Vegas, NV 89121 (800) 733-9267 • Fax (702) 932-2666 www.psiexams.com

BE SURE TO READ ALL DIRECTIONS CAREFULLY BEFORE COMPLETING THE EXAMINATION REGISTRATION FORMS. IMPROPERLY COMPLETED FORMS WILL BE RETURNED UNPROCESSED.

If examination fees are not the correct amount, PSI will return them to you immediately with instructions on correct examination registration procedures.

Please allow three days to process your Registration. After three days, candidates may call PSI to schedule the examination after 7:30 a.m., Eastern Time, (800) 733-9267.

# CANCELING AND RESCHEDULING AN EXAMINATION APPOINTMENT

You may cancel and reschedule an examination appointment without forfeiting your fee if your *cancellation notice is received 2 days before the scheduled examination date.* You may call PSI at (800) 733-9267 (a representative is available Monday through Friday, between 4:30 am and 5:00 pm and Saturday, between 8:00 am and 2:00 pm, Pacific Time). Please note that you may also use the automated system, using a touch-tone phone, 24 hours a day in order to cancel and reschedule your appointment.

Note: A voicemail message is not an acceptable form of cancellation. Please use the Internet, automated telephone system, or call PSI and speak to a Customer Service Representative.

#### MISSED APPOINTMENT OR LATE CANCELLATION

Your registration will be invalid, you will not be able to take the examination as scheduled, and you will forfeit your examination fee, if you:

- Do not cancel your appointment 2 days before the scheduled examination date;
- Do not appear for your examination appointment;
- Arrive after examination start time; or
- Do not present proper identification when you arrive for the examination.

#### SPECIAL EXAMINATION ARRANGEMENTS

All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and every reasonable accommodation will be made in meeting a candidate's needs. Applicants with disabilities or those who would otherwise have difficulty taking the examination should make a request for alternative arrangements with PSI. Requests for any special accommodations should be made in writing, describing the specific accommodations that will be needed, and must include supporting documentation on official letterhead from a



licensed professional. Please fill out the form at the end of this Candidate Information Bulletin and fax to PSI (702) 932-2666. This form also includes out-of-state testing requests.

#### EXAMINATION SITE CLOSING FOR AN EMERGENCY

In the event that severe weather or another emergency forces the closure of an examination site on a scheduled examination date, your examination will be rescheduled. PSI personnel will attempt to contact you in this situation. However, you may check the status of your examination schedule by calling (800) 733-9267. Every effort will be made to reschedule your examination at a convenient time as soon as possible.

## **EXAMINATION SITE LOCATIONS**

Baker City

2101 Main Street, #203 Baker City, OR 97814

From I-84 take Exit 304 onto Campbell Street. Campbell Street to Main Street, turn left. Test site is on right side, Northwest corner of Main and Broadway, upstairs above Charlie's Ice Cream, in the Basch Sage Mini Mall, Room 203. Enter from Broadway.

Bend

325 N. Vermont Place, #106 Bend, OR 97701

From US-97 going North, continue on SE 3rd St. Turn left on NW Greenwood Ave. Turn right on NW Wall St. Then turn left on Vermont Place. Vermont Place is a one block street.

#### Eugene

1955 Empire Park Drive, Suite #1 Eugene, OR 97402

From the Beltline Hwy West, take exit B-Eugene Airport, Junction City. At the stoplight turn right. Take the second stop light at Barger Drive. Turn right onto Barger Drive, then immediately turn left on Empire Park Dr. Take a left into the parking lot. Site is in the Edward Jones Investment Building). (There is a Subway on the corner of Barger and Hwy 99N).

## Independence

4901 Airport Rd Independence State Airport Independence, OR 97351

Take I-5 to exit 260A for OR-99E BUS S/Salem Expy and follow, then taking a slight left onto Commercial St NE. Turn right on Marion St NE continuing onto OR-22W/Marion St. Bridge. Follow OR-22W for 5 miles, then turn left onto OR-51S/Independence Hwy. Turn right onto Polk St and continue onto Hoffman Rd. Turn right onto Airport Rd.

#### Medford

1236 A North Riverside Ave Medford, OR 97501

From I-5 going North, take the Barnett Street off ramp and turn left. Turn right on Riverside Ave, and go approximately 3 miles. The site will be on the right hand side.

From I-5 going South, take the North exit (#30) and turn right and follow signs to "City Center". Pass McAndrews, and turn left on Manzinita. This dead ends at Riverside. Turn left on Riverside, go one block and site will be on the right hand side. From the West Side:

Get on I-84 heading East. TakeExit No. 5-82<sup>nd</sup> Ave. Turn right on NE Multnomah St. Turn right on NE 82<sup>nd</sup> Ave. Turn right on NE Sandy Blvd. The site is on the left ½ block from 82<sup>nd</sup> and Sandy.

From South East Portland:

Get on I-205N toward Seattle. Take Exit 23B Killingsworth St/US 30 Bypass W exit. Take the Sandy Blvd. West/US-30 Business W exit-exit number 23B on the left. Turn slight right on NE Sandy Blvd. Site is on the right ½ block before you reach 82<sup>nd</sup> and Sandy.

From Vancouver, WA:

Get on I-205 South toward Salem. Take Exit 23A-the US-30 Bypass E exit toward Sandy Blvd. Turn right on NE Columbia Blvd/US-30 Bypass. Turn right on NE Sandy Blvd. Site is on the right ½ block before you reach 82<sup>nd</sup> and Sandy. Site is across from the Grotto.

## **REPORTING TO THE EXAMINATION SITE**

You should arrive at least 30 minutes prior to your scheduled appointment time. This allows time for the sign-in and identification verification. If you arrive late, you will not be admitted to the examination site and you will forfeit your examination registration fee.

#### **REQUIRED IDENTIFICATION AT EXAMINATION SITE**

*You must provide 2 forms of identification.* One must be a VALID form of government-issued identification (driver's license, state ID, passport), which bears your signature and has your photograph or a complete physical description. The second ID must have your signature and preprinted legal name. All identification provided must match the name on the Examination Registration Form.

If you cannot provide the required identification, you must call (800) 733-9267 at least 3 weeks prior to your scheduled appointment to arrange a way to meet this security requirement. Failure to provide all of the required identification at the time of the examination without notifying PSI is considered a missed appointment, and you will not be able to take the examination.

#### SECURITY PROCEDURES

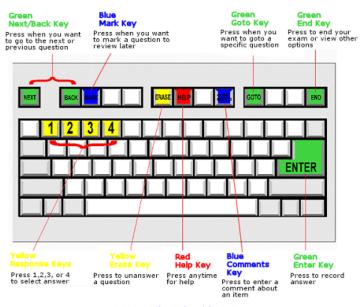
The following security procedures will apply during the examination:

- Cell phones, pagers, and children are not allowed in the examination site.
- No smoking, eating, or drinking will be allowed in the examination site.
- Copying or communicating examination content is a violation of PSI security policy and Oregon State Law. Either one may result in the disqualification of examination results and may lead to legal action.



## TAKING THE EXAMINATION BY COMPUTER

Taking the PSI examination by computer is simple. You do not need any computer experience or typing skills. You will use fewer keys than you use on a touch-tone telephone. All response keys are colored and have prominent characters. An illustration of the special keyboard is shown here. You may also use the mouse.



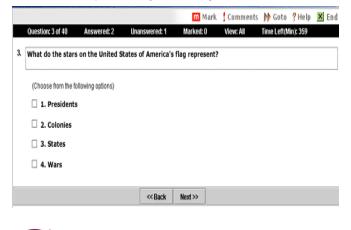
## **IDENTIFICATION SCREEN**

You will be directed to a semi-/private testing station to take the examination. When you are seated at the testing station, you will be prompted to confirm your name, identification number, and the examination for which you are registered.

#### TUTORIAL

Before you start your examination, an introductory tutorial to the computer and keyboard is provided on the computer screen. The time you spend on this tutorial, up to 15 minutes, DOES NOT count as part of your examination time. Sample questions are included following the tutorial so that you may practice using the keys, answering questions, and reviewing your answers.

One question appears on the screen at a time. During the examination, minutes remaining will be displayed at the top of the screen and updated as you record your answers.



#### EXAMINATION QUESTION EXAMPLE

During the examination, you should press 1, 2, 3, or 4 to select your answer or press "MARK" to mark it for later review. Or you may simply click on the box to the left of your answer with the mouse. You should then press "ENTER" to record your answer (or click on Next with the mouse) and move on to the next question. A sample question display follows:

IMPORTANT: After you have entered your responses, you will later be able to return to any question(s) and change your response, provided the examination time has not run out or you have ended your examination.

#### **EXAMINATION REVIEW**

You will be given 30 minutes at the end of ALL sections to review the items you missed. The items will not be in any particular order.

Comments may be entered on the computer keyboard during the examination. Your comments regarding the questions and the examinations are welcomed. Comments will be analyzed by PSI examination development staff. While PSI does not respond to individuals regarding these comments, all substantive comments are reviewed. This is your opportunity to notify the licensing agency if you dispute a question on the exam.

## SCORE REPORTING

The following summary describes the score reporting process:

- <u>On screen</u> your score will appear immediately on the computer screen. This will happen automatically at the end of the time allowed for the examination; if you are using review features, you will be able to obtain your score immediately when you indicate that you have finished and would like to see your results.
  - If you <u>pass</u>, you will immediately receive a successful notification and performance summary on the screen.
  - If you <u>do not pass</u>, you will immediately receive an unsuccessful notification on the screen along with a diagnostic report indicating your strengths and weaknesses by examination portion.
- <u>On paper</u> an official score report will be printed at the examination site.

## LENGTH PASSING SCORES ARE VALID

Once you have received a passing score on a section of the exam the score remains valid for a period of 12 months. If you do not obtain a license prior to the exam score expiring you will have to retake and pass that section of the exam again.

If you have applied for the Probationary License, you must pass all 7 exam sections within 12 months of the first sitting in order to obtain this license. If you do not, you will not receive this license and must reapply.

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## **PRETEST ITEMS**

In addition to the number of examination items specified, a small number of five to ten "pretest" questions may be administered to candidates during the examinations. These questions will not be scored and the time taken to answer them will not count against examination time. The administration of such non-scored experimental questions is an essential step in developing future licensing examinations.

## WHAT TO BRING TO THE EXAMINATION

You should bring an engineer's scale (1:20) and a calculator. Only non-programmable calculators that are silent, battery operated, do not have paper tape printing capabilities, and do not have a keyboard containing the alphabet will be allowed in the examination site.

You are also allowed to bring in one language translation dictionary or electronic translating device if English is not your first language. No notes or writing on or in these translation aides is allowed.

## EXAM SECTIONS

## LAWS, RULES, AND BUSINESS PRACTICE (SECTION FOR OWNER/MANAGING EMPLOYEES)

Time limit: 3 hours

Passing score: 75%

This section is open book (to be provided at the exam site)

Торіс	# of
	Questions
Board	2
License Requirements	11
Insurance/Bonding	3
Independent Contractor	3
Employment Law	4
Business Type/Licensing	3
Contracts	5
Supervision	4
Claims/Dispute Resolution	4
Enforcement	3
Related Laws	4
Lien Law	4
Building Codes/Permits	3
Safety/Hazard Communication	10
EPA, DEQ, Water Rights	3
American Disability Act (ADA)	2
Public Contracts	3
Unlawful Trade Practices Act (UTPA)	2
Federal Highway Law/Commercial Drivers License (CDL)	2
Business Setup/ Organization	7
Communications	6
Accounting/Budgeting	7
Estimating	5
Total Questions	100

## REFERENCE LIST

The Oregon Revised Statutes packet can be found on the web at: <u>http://www.lcb.state.or.us/exammaterials</u>

- ORS 656 Workers' Compensation, 2011
- ORS 279C Public Contracting, Public Improvements and Related Contracts, 2011
- ORS 447 Plumbing; Architectural Barriers, 2011
- ORS 479 Protection of Buildings from Fire; Electrical Safety Law, 2011
- ORS 571 Nurseries, Growers, Dealers, Christmas Tree Growers, 2011
- ORS 671.520 671.760 Architect, Landscape Professions and Business, 2011
- ORS 87 Statutory Liens, 2011
- ORS, Title 52, Chapter 670, Section 600 Independent Contractors, 2011
- OAR 808 Landscape Contractors Board
- OR OSHA, 2008
- OAR 603, Division 54 Nurseries, 2011
- Oregon Owner/Managing Employee Manual, 2010

## PLANTS AND TURF

#### Time limit: 1 hour Passing score: 75% This section is open book (to be provided at the exam site)

Topic	# of
Торіс	Questions
Plant Exposure	7
Plant ID	3
Plant Type	9
Plant Use and Size	13
Planting/Staking	5
Turfgrass	9
Water and Soil Requirements	9
Total Questions	55

Questions in this section address:

- Seed mixtures for various Oregon localities & seeding rates
  - 2. Installation of sod
  - 3. Cultural requirements of specific grass mixtures and plants
  - 4. Plant identification (Latin and common names)
  - 5. Plant installation, including planting,
  - fertilization, staking, watering, amending soils
  - 6. Balled and burlapped vs. bare root installation7. Soil structure as related to plant cultivation

## REFERENCE LIST

Plants and Turf:

- Arboriculture Integrated Management of Landscape Trees, Shrubs, and Vines, Prentice-Hall PTR, 2004
- Oregon Plant Study Guide, 2006
- Turfgrass Management, Pearson Education, Inc., 8th Edition, 2008
- Western Garden Book, Sunset Publishing Company, 2007



## LANDSCAPE CONSTRUCTION

Time limit: 1 hour and 15 minutes Passing score: 75% This section is open book (to be provided at the exam site)

Торіс	# of
Topic	Questions
Concrete/Masonry	5
Decks/Arbors	6
Fences/Gates	5
Low Voltage Lighting	10
Lumber/Fasteners	3
Paving	7
Project Layout	4
Retaining Walls	10
Steps/Stairs	2
Water Features	8
Total Questions	60

Questions in this section address:

- 1. Decks:
  - Identification of the parts of a deck
  - Choice of materials and installation
  - Joists
  - Guardrails
  - Blocking
  - Flashing
- 2. Low Voltage Wiring:
  - Choice of materials and installation
  - Cables and transformers
- 3. Concrete and Masonry:
  - Choice of materials and installation
  - Joints
  - Reinforcement
  - Expansion strips
  - Mortar
  - Brick paving
  - Tooling and curing
- 4. Retaining Walls (both dry stack and mortared):
  - Choice of materials and installation
  - Footings
  - Joints
  - Weep holes and drains
- 5. Fences:
  - Choice of materials and installation
  - Postholes and joints
  - Gates
  - Painting or staining
- 6. Water-features:
  - Choice of materials and installation
  - Pumps
  - Water clarity and quality
- 7. Steps, Walks, Paths:
  - Choice of materials and installation
- 8. Materials:
  - Terminology, including board size, lumber grades, nails
- 9. Project Layout
  - Use of right triangles
    - Staking

#### REFERENCE LIST

## Landscape Construction:

 Landscape Construction, Custom 3<sup>rd</sup> Edition—Oregon Landscape Contractors Board Special Edition, 2011, Cengage Learning

## **GRADING AND DRAINAGE**

Time limit: 1 hour Passing score: 75% This section is open book (to be provided at the exam site)

For this section, a calculator and an engineer's scale are required. All calculations should be to the 100th decimal (2 places). A grading plan will be provided with a scale of 1": 20' (one inch to 20 feet).

Topic	# of
Торіс	Questions
Cut and Fill	3
Drainage Materials	4
Effects of Grading	5
Erosion Control	6
Grading/Drainage Calculations	6
Plan Reading - Drainage	5
Soil Types	5
Surface/Subsurface Drainage	6
Surveying	5
Total Questions	45

Questions in this section address:

- 1. Surface and Subsurface:
  - Removing and adding soil
  - Area drains, French drains
  - Grading for pathways
  - Defining terms which relate to grade
  - 2. Surveying:
    - Specific calculations of grade (given elevation points)
      - Using the surveying instrument
    - Topographical surveys
  - 3. Erosion Control:
    - Methods for slowing erosion
    - Soil types as they relate to erosion
    - Techniques for erosion control on slopes
  - 4. Soil Types:
    - Percolation rates and water retention rates of various soils
    - Erosion rates and angle of repose of various soil types
  - 5. Effects of Grading:
    - Effects of grading a site
      - What happens when grading is too flat or
      - too steep
      - Swales
  - 6. Slope Calculations:
    - Specific mathematical questions
  - 7. Reading Plans (questions refer to a grading plan Provided during examination):
    - Identification of terms and symbols on the plan such as directional arrows, contour lines, swales, berms, cuts, and elevations
    - Calculation of contours and slopes
    - Choice of subsurface for pavers (stone & concrete), walks, pathways
    - Choice of soil amendments
    - Choice of erosion control materials (topdressings, nettings, etc.)

- 8. Cutting and Filling:
  - Calculating amounts for excavation and fill (rock, bark, soil, etc.)

## REFERENCE LIST

- Grading and Drainage:
  - Landscape Construction, Custom 3<sup>rd</sup> Edition–Oregon Landscape Contractors Board Special Edition, 2011, Cengage Learning

## SAFETY, ESTIMATING, SOILS AND CHEMICALS

Time limit: 1 hour

Passing score: 75%

This section is open book (to be provided at the exam site)

Торіс	# of Questions
Estimating/Plan Reading	12
Safety	14
Soil Science	10
Design	14
Total Questions	50

## SAFETY

- 1. Equipment Safety:
  - Construction Equipment-chainsaws, trenchers, etc.
    - GFCI and extension cords
- 2. First Aid:
  - Kits and supplies
- 3. Handling and Storing Materials and/or Hazardous Substances:
  - Storage containers and locations
  - Storage of Materials (lumber, rock, etc.)
  - MSDS
- 4. OR-OSHA:
  - OR-OSHA services
    - Safety committees and employee training
- 5. Personal Protection:
  - Clothing and personal protective
  - equipment
  - Tools and ladders
- 6. Public Safety:
  - Traffic controls
  - · Hazards on job site, such as trenches
  - Use of chemicals

## **ESTIMATING**

- 1. The Landscape Plan:
  - Calculating areas of turf, planting beds, walkways, etc.
  - · Calculating the amount of materials needed for coverage (bark, gravel, brick, edging)
  - · Determining the number of plants needed per section of the plan
- 2. General Estimating:
  - Given specific dimensions, calculating units of bark, cubic feet of sand, rolls of sod, number of trucks needed, feet of edaina
  - Calculating price to customer given cost of material, markup, overhead, profit and handling

- SOILS
  - 1. Soils:
    - Soil matrix, tilth, structure
      - · Water availability and nutrients
    - Fertilizer components and application
    - 2. Calculations:
      - Amount of soil amendments needed to achieve a certain percentage given the depth
      - Amount of fertilizer to apply given the area of turf (or size of plant) and the rate of application

## CHEMICAL

- 1. Regulation of pesticides and warning labels
- 2. Herbicides, antitranspirants, and weed killers

## REFERENCE LIST

Safety, Estimating, Soils and Chemicals

- Landscape Construction, Custom 3<sup>rd</sup> Edition—Oregon Landscape Contractors Board Special Edition, 2011, Cengage Learning
- Information for the Landscaping Profession, Oregon OSHA, 2008

## **IRRIGATION**

Time Limit: 2 hours

Passing score: 75%

This section is open book (to be provided at the exam site)

Topics	# of
	Questions
Design	25
Drip Irrigation	9
Electrical	6
Heads/Nozzles	8
Hydraulics	12
Install/Practical Applications	4
Pipe/Fittings	11
Plan Questions - Irrigation	6
Plant Culture - Irrigation	7
Repair/Troubleshooting	4
Valves	2
Winterizing	2
Scheduling	4
Total Questions	100

## REFERENCE LIST

Irrigation:

- Landscape Construction, Custom 3<sup>rd</sup> Edition–Oregon Landscape Contractors Board Special Edition, 2011, Cengage Learning
- Oregon Plant Study Guide, 2006
- ORS 671.520 671.760 Architect, Landscape Professions and Business, 2011
- ORS 808 Landscape Contractors Board

## **BLACKFLOW**

Time limit: 1 hour Passing score: 75% This section is closed book.

Topics	# of
Topics	Questions
Definitions	11
Devices	21
Piping	8
Installation Code	10
Total Questions	50

Abbreviations used in the Plumbing Code refer to standards or specifications issued by the organizations listed below:

**ASHRAE** American Society of Heating, Refrigeration and Air Conditioning Engineers

- AWWA American Water Works Association
- ANSI American National Standards Institute
- AHAM American Home Appliance Manufacturers
- **ASTM** American Society for Testing Materials
- ASME American Society of Mechanical Engineers
- **CS** Commercial Standards
- **PS** Product Standards
- **FS** Federal Specifications

**IAPMO** International Association of Plumbing and Mechanical Officials

- UPC Uniform Plumbing Code
- UL Underwriters Laboratory
- WQA Water Quality Association
- ICBO International Conference of Building Officials
- **ASSE** American Society of Sanitary Engineers
- CABO Council of American Building Officials
- UMC Uniform Mechanical Code
- **UBC** Uniform Building Code

SMACNA Sheet Metal and Air Conditioning Contractors of North America

- **CISPI** Cast Iron Soil Pipe Institute
- **OSPSC** Oregon State Plumbing Specialty Code
- **OSPB** Oregon State Plumbing Board
- BCD Building Codes Division
- **OPCCC** Oregon Plumbing Code Change Committee

#### REFERENCE LIST

- Backflow:
- Cross-Connection Control Manual, Environmental Protection Agency, 2003
- Oregon Plumbing Specialty Code, International Association of Plumbing and Mechanical Officials, 2011
- ORS 447 Plumbing; Architectural Barriers, 2011
- ORS 808 Landscape Contractors Board

## SAMPLE EXAM QUESTIONS

The following questions are offered as examples of the types of questions you will be asked during the course of the examination. They are intended primarily to familiarize you with the style and format of questions you can expect to find in the examinations. The examples do NOT represent the full range of content or difficulty levels found in the actual examinations.

## LAWS, RULES and BUSINESS PRACTICE

- 1. The State Landscape Contractors Board consists of members.
  - \_\_\_\_\_nem
  - B. 7
  - C. 6

D. 9

- 2. The bond and insurance requirements are a required condition for the:
  - A. Landscape construction professional.
  - B. All employees of the landscape contracting business.
  - C. Landscape contracting business.
  - D. Certified employees of the landscape contracting business.
- 3. "LLC" is a commonly used acronym for:
  - A. Limited Liability Company.
  - B. Licensed Landscape Contractor.
  - C. Limited Landscape Construction.
  - D. Liability Limits on Construction.
- 4. Failure to notify the board of a change of address within 10 days of the change by a landscape construction professional or landscape contracting business will result in a civil penalty of:
  - A. \$1000
  - B. \$500
  - C. \$100
  - D. \$200
- 5. When a properly licensed landscape construction professional working for a licensed landscape contracting business installs a backflow assembly the business must:
  - A. Have a owner of the business inspect the work when it is completed.
  - B. Obtain a plumbing permit before the assembly is installed
  - C. Obtain a plumbing permit before the assembly is pressurized.
  - D. Have the assembly properly inspected by a journeyman plumber.
- 6. Which of the following is NOT considered a physical hazard:
  - A. A combustible liquid.
  - B. A compressed gas.
  - C. An explosive material.
  - D. An un-compressed inert gas.
- 7. If a person files Chapter 7 bankruptcy they are still responsible for:
  - A. Child support
  - B. Credit card debt
  - C. Car payments

- D. Medical Bills
- 8. When interviewing an applicant for a new job you may:
  - A. Ask questions about an applicant's physical state.
  - B. Ask question about an applicants mental problems
  - C. Not ask questions about an applicants medical problems
  - D. Not ask questions about their attendance rate at a previous job.
- 9. Installing a pathway with a slope of 3:12 (14.5 degrees):
  - A. Is recommended for only electric powered wheel chairs.
  - B. Is recommended for both commercial and public access ramps.
  - C. Is recommended for only commercial ramps.
  - D. Is recommended for only residential use when loading unoccupied electric wheel chairs.
- 10. When performing landscape work in Oregon all work must be done in conformance:
  - A. With a written contract.
  - B. To industry standards set out in the OLCA guidelines.
  - C. To standards set by the State Building Code Division.
  - D. To standard set by the State Landscape Contractors Board.
- 11. The ratio of Current Assets to Current Liabilities is called:
  - A. Quick Ratio
  - B. Liability to Asset Ratio
  - C. Cash to Current Liability Ratio
  - D. Current Ratio
- 12. The first step in determining a price for labor or materials in a landscape business is to:
  - A. Set up a chart of accounts.
  - B. Determine the true cost of the labor or material.
  - C. Determine what markup your competitors use for labor and material.
  - D. Determine and use what your competitors charge for labor and then markup cost of materials at least 10% if you desire a 10% profit on materials.
- 13. The difference between passive and active listening is:
  - A. Passive listening requires more motivation to listen.
  - B. Active listening requires more active verbalization of your ideas.
  - C. Passive listening requires more focus on the passiveness of the speaker.
  - D. Active listening requires intent to understand.
- 14. In the pre-contract phase of the contract process which of the following is NOT included:
  - A. Determine objective of client
  - B. Make an offer
  - C. Discuss time expectations
  - D. Determine exactly who is the client.

Answers for Laws, Rules & Business Practice: 1(B); 2(C); 3(A); 4(D); 5(B); 6(D); 7(A); 8(C); 9(D); 10(A); 11(D); 12(A); 13(D); 14(B).

## PLANTS - TURF

- 1. Which of the following deciduous shrubs is noted for the display of its berries?
  - A. Pyracantha coccinea
  - B. Ilex aquifolium
  - C. Symphoricarpos albus
  - D. Mahonia repens
- 2. Which of the following shrubs would be best in a sunny bed with reflected heat?
  - A. Skimmia japonica
  - B. Ilex cornuta
  - C. Cytisus Praecox
  - D. Fatsia japonica

Answers for Plants - Turf: 1(C); 2(C).

## LANDSCAPE CONSTRUCTION

- 1. The 3-4-5 triangle measuring technique is used for:
  - A. locating distance between postholes.
  - B. figuring infill requirements.
  - C. determining right angles.
  - D. determining the slope of a specific grade.
- 2. What is the best slope for the tread of a concrete step?
  - A. 3.5%
  - B. 10%
  - C. 5%
  - D. 1%

Answers for Landscape Construction: 1(C); 2(D).

## **GRADING AND DRAINAGE**

- 1. If a spot elevation reads 5.5 at point A and the second elevation reads 4.2 at point B, what is the elevation differential?
  - A. 9.7 inches above absolute elevation.
  - B. 9.7 feet elevation differential.
  - C. 1.3 feet.
  - D. 1.3 inches.
- 2. The percentage of slope is calculated by:
  - A. First determining the rate of inclination.
  - B. Percent = length/3.1416 averaged to nearest 2 decimals.
  - C. The formula rise/run = slope.
  - D. The formula 3.1416/length averaged to the nearest 2 decimals.

Answers for Grading and Drainage: 1(C); 2(C).



## SAFETY, ESTIMATING, SOILS, AND CHEMICALS

- 1. MSDS are:
  - A. not required if the chemical is a trade secret.
  - B. required only when transporting chemicals from one county to another.
  - C. never used when other official forms are used because the redundancy is confusing.
  - D. required for each chemical used.
- 2. Another name associated with OR-OSHA is:
  - A. Oregon Occupational Safety and Health Division.
  - B. Oregon Organization for Science and Health Association.
  - C. Occupational Safety and Health Act.
  - D. Oregon Occupations in Science and Health Administration.
- 3. A right triangular area measures 17' 10" x 54' 2". To the nearest 1/100<sup>th</sup>, how many square feet are in the triangle?
  - A. 463.41 square feet
  - B. 756.97 square feet
  - C. 387 square feet
  - D. 482.93 square feet
- 4. A ton of the wall rock will cover about 25 square feet of wall surface. Given a wall 36" tall and 50 feet in length, how many tons of rock will be needed (to the nearest 1/2 ton)?
  - A. 72 tons
  - B. 7.5 tons
  - C. 7 tons
  - D. 6 tons
- 5. The soil matrix is:
  - A. the arrangement of layers in the soil profile.
  - B. a graphic chart of soil particle sizes.
  - C. a three-phase system of solid soil particles, liquid, and gas.
  - D. the pressure of soil water in the soil profile.
- 6. At which of the following soil water conditions is water available for plant use?
  - A. Gravitational water
  - B. Field capacity water
  - C. Hygroscopic water
  - D. Saturation
- 7. Chemicals will be labeled to indicate the hazard to humans. Which of the following indicates a chemical with the greatest hazard?
  - A. Toxic
  - B. Warning
  - C. Caution
  - D. Danger
- 8. When designing a residential driveway for cars to pass side to side the recommended minimum width of some portion of the driveway would need to be:
  - A. 18 feet
  - B. 24 feet
  - C. 12 feet
  - D. 30 feet

- 9. When designing a residential driveway for cars to pass side to side the recommended minimum width of some portion of the driveway would need to be:
  - A. 18 feet
  - B. 24 feetC. 12 feet
  - C. 12 feet D. 30 feet
  - J. 30 leel
- 10. In the State of Oregon, Landscape Designers are NOT allowed to:
  - A. place plants on the site.
  - B. show construction details on how to build a deck.
  - C. face plants.
  - D. instruct how soil is to be amended.

Answers for Safety, Estimating, Soils and Chemicals: 1(D); 2(A); 3(D); 4(D); 5(C); 6(B); 7(D); 8(A); 9(B).

## IRRIGATION

- 1. The velocity of flow through the service line should not exceed what velocity?
  - A. 3 to 5 fps.
  - B. 5 to 7.5 fps.
  - C. 7.5 to 10 fps.
  - D. 10 to 15 fps.
- 2. Unions may be placed:
  - A. anywhere in the irrigation piping system.
  - B. only downstream of the backflow device.
  - C. only upstream of the control valves.
  - D. only downstream of the control valves.

Answers for Irrigation: 1(B); 2(A).

## BACKFLOW

- 1. The type of backflow prevention device to be used is determined by the:
  - A. anticipated degree of hazard.
  - B. cost of the device.
  - C. expected life of the device.
  - D. size of the piping to which the device is attached.

Answer for Backflow: 1(A)



OREGON LANDSCAPE CONSTRUCTION PROFESSIONAL OR OWNER/MANAGING EMPLOYEE
EXAMINATION REGISTRATION FORM

	EXAMINATION REGISTRATION FORM
appropriate fee. PLEASE TYP	Before you begin Ition Bulletin before filling out this registration form. You must provide all information requested and submit the PE OR PRINT LEGIBLY. Registration forms that are incomplete, illegible, or not accompanied by the proper fee will be ration fees are not refundable or transferable.
1. Legal Name:	
	First NameLast NameM.I.
2. Candidate ID#	
3. Mailing Address:	
	Number, Street Apt/Ste
	City     State     Zip Code
4. Telephone: Home	Office
5. Email:	@

6. Examination: Please check the appropriate boxes of the examination(s) you are registering for.

psi

Examination Sections for Landscape Construction Professional	Length of Section
Laws, Rules and Business Practice	3 hours
General A: Plants and Turf	1 hour
General B: General Construction	1 hour
General C: Grading and Drainage	1 hour
General D: General Safety, Estimating, Soil Science, Chemicals	1 hour
Irrigation	2 hours
Backflow	1 hour

Initial sitting and retake fees - \$65 for first section and \$10 for each additional section per sitting.

Examination Section for Owner/Managing Employee		Length of Section
	Laws, Rules and Business Practice	3 hours
 Initial sitting and retake fees - \$65		

7. Total Fees Included: \$\_\_\_\_\_ REGISTRATION FEES ARE NOT REFUNDABLE OR TRANSFERABLE

(Mastercard, VISA, Money Order or Cashier's Check only. Personal and company checks are not accepted.)

Credit card (MasterCard or VISA) payment accepted for phone or fax registrations only. (Check One):	MC		VISA
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Card No:	: Exp. Date:		
Card Verification No:	For your security, PSI requires you to enter the card identification number located on your credit card. The card identification number is located on the back of the card and consists of the last three digits on the signature strip.		
Cardholder Name (Print):	Signature:		

No

Yes

8. I am faxing the Special Arrangement Request (at the end of this bulletin) and required documentationn.

9. Affidavit: I certify that the information provided on this registration form (and/or telephonically to PSI) is correct. I understand that any falsification of information may result in denial of licensure. I have read and understand the examination information bulletin.

Signature:	Date:		
·	IF YOU ARE REGISTERING BY MAIL OR FAX, SIGN AND DATE THIS REGISTRATION FORM ON THE LINES PROVIDED.		
	Complete and forward this registration form with the applicable examination fee to:		
PSI * ATTN: Examination Registration OR LAND			
	3210 E Tropicana * Las Vegas * NV * 89121		
	Fax (702) 932-2666 * (800) 733-9267 * TTY (800) 735-2929 * <u>www.psiexams.com</u>		



## SPECIAL ARRANGEMENT REQUEST FORM OR OUT-OF-STATE TESTING REQUEST

All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990. Applicants with disabilities or those who would otherwise have difficulty taking the examination may request special examination arrangements. Candidates who wish to request special arrangements because of a disability should fax this form and supporting documentation to PSI at (702) 932-2666.

#### Requirements for special arrangement requests

You are required to submit documentation from the medical authority or learning institution that rendered a diagnosis. Verification must be submitted to PSI on the letterhead stationary of the authority or specialist and include the following:

- **Description of the disability and limitations related to testing**
- **Solution** Recommended accommodation/modification
- Name, title and telephone number of the medical authority or specialist
- Original signature of the medical authority or specialist

Date		_
Legal Na	ime:	
	Last Name	First Name
Address:	:	
	Street	City, State, Zip Code
Telepho	ne : ()	()
	Home	Work
Email Ad	ddress:	
Check ar	ny special arrangements you require (requests mus	st concur with documentation submitted):
	ader (as accommodation for visual impairment learning disability)	<ul> <li>Extended Time (Additional time requested:)</li> </ul>
🗆 Lar	ge-Print written examination	Other
_		
	t-of-State Testing Request (this request does not uire additional documentation)	Site Requested:
	L Accommodation (Self Declared). If English is not you uesting the following additional minutes.	our primary language, you may request additional time for your

EXAMINATION SECTIONS	TIME ALLOWED INCLUDING ADD'L TIME
Laws, Rules and Business Practice	4 hours
General A: Plants and Turf	1 hour and 20 minutes
General B: General Construction	1 hour and 40 minutes
General C: Grading and Drainage	1 hour and 20 minutes
General D: General Safety, Estimating, Soil Science, Chemicals	1 hour and 20 minutes
Irrigation	2 hours and 40 minutes
Backflow	1 hour and 20 minutes

- **Solution** Complete and fax this form, along with supporting documentation, to (702) 932-2666.
- After 4 business days, please call (702) 939-6750 and leave a voice message.
- PSI Special Accommodations will call you back to schedule the examination within 48 hours.

PSI Services LLC 3210 E Tropicana Las Vegas, NV 89121