Board Exam Desk

Landscape Architecture Reviewer

Landscape Architecture Licensure Examination | PRC | 120 original questions

2026 Edition | Updated November 2026

Original board-style practice questions with an answer key.

Practice questions

History and Theory of Landscape Architecture

1. A client asks for a garden inspired by the Mughal tradition, divided into four quarters by intersecting water channels that symbolize the rivers of paradise. Which garden type is being described?

A. Parterre de broderie
B. Charbagh
C. Hortus conclusus
D. Karesansui

2. Which designer, working with Calvert Vaux, won the competition for Central Park in New York with the Greensward Plan?

A. Andre Le Notre
B. Humphry Repton
C. Lancelot Capability Brown
D. Frederick Law Olmsted

3. The formal gardens of Versailles, with their grand axes, parterres and long canals, are chiefly the work of which designer?

A. Frederick Law Olmsted
B. Gertrude Jekyll
C. Andre Le Notre
D. William Kent

4. An 18th-century English estate keeps grazing deer away from the house lawn without any visible fence interrupting the view of the park. Which feature achieves this?

A. A clipped hedge maze
B. A raised terrace with balustrade
C. A ha-ha, a sunken wall and ditch
D. A pleached allee of clipped trees

5. A temple garden in Kyoto consists of raked white gravel and carefully placed stones, with no water and few plants. This style is known as

A. karesansui
B. roji
C. tsukiyama
D. kaiyu-shiki

6. A Renaissance villa at Tivoli near Rome is renowned for its terraced garden filled with hundreds of fountains, cascades and water jets. Which villa is this?

A. Stowe
B. Villa d'Este
C. Vaux-le-Vicomte
D. Generalife

7. A study tour visits a Moorish palace complex in Granada with the Court of the Lions and narrow water rills. Which site is being visited?

A. Sissinghurst
B. The Alhambra
C. Villa Lante
D. Ryoan-ji

8. Which landscape architect popularized the layered map-overlay method of suitability analysis in the book Design with Nature?

A. Thomas Church
B. Lawrence Halprin
C. Kevin Lynch
D. Ian McHarg

9. In Kevin Lynch's image of the city, a busy plaza where several major streets converge and people pause or change direction is classified as a

A. node
B. landmark
C. district
D. edge

10. A resort garden is composed so that a distant volcano appears framed as part of the garden's own scenery. Which Japanese design concept does this apply?

A. Karikomi, or clipped shrubs
B. Miegakure, or hide-and-reveal
C. Shakkei, or borrowed scenery
D. Tsukubai, or a stone basin

11. Which American architect and planner was engaged in the early 1900s to prepare development plans for both Manila and Baguio?

A. Frederick Law Olmsted Jr.
B. Pierre L'Enfant
C. Ebenezer Howard
D. Daniel Burnham

12. A naturalistic estate design features a serpentine lake, rolling lawns sweeping up to the house, and scattered clumps of trees with a perimeter belt. This is most characteristic of

A. Lancelot Capability Brown
B. Andre Le Notre
C. Thomas Church
D. Roberto Burle Marx

13. Identical palms planted at equal spacing along a boulevard primarily create which design quality?

A. Contrast
B. Focalization
C. Asymmetric balance
D. Rhythm

14. On one side of an entry walk stands a single large specimen tree; on the other side is a group of three smaller shrubs of similar visual weight. This arrangement demonstrates

A. informal or asymmetric balance
B. radial balance about a center
C. monotony from lack of variety
D. formal or symmetric balance

15. To make a small courtyard appear deeper than it actually is, which color strategy is most effective?

A. Bright white flowers at the far end
B. Strongly mixed colors throughout
C. Cool blues and violets at the far end
D. Warm reds and oranges at the far end

16. A designer wants a rectangular plaza 30 m long whose width relates to its length by the golden ratio. What width is closest?

A. 15.0 m
B. 18.5 m
C. 22.5 m
D. 20.0 m

17. Which British designer is best remembered for painterly herbaceous borders arranged in carefully graded color drifts, often in collaboration with Edwin Lutyens?

A. Gertrude Jekyll
B. Humphry Repton
C. Joseph Paxton
D. William Kent

18. The Donnell Garden in California, with its free-form kidney-shaped pool and modernist layout, is a celebrated work of which designer, author of Gardens Are for People?

A. Thomas Church
B. Garrett Eckbo
C. Lawrence Halprin
D. Dan Kiley

19. The undulating black-and-white wave pavement of the Copacabana beach promenade in Rio de Janeiro is associated with which landscape architect?

A. Geoffrey Jellicoe
B. Luis Barragan
C. Martha Schwartz
D. Roberto Burle Marx

20. A park bench nook is placed on a slight rise, backed by dense planting, with an open view over a lawn. People prefer it because it offers both outlook and shelter. Which theory explains this preference?

A. Gestalt law of closure
B. Attention restoration theory
C. Genius loci theory
D. Prospect-refuge theory

Plant Materials and Planting Design

21. A 60 m2 groundcover bed is to be planted with plugs at 0.40 m on center in a triangular pattern. About how many plants are required?

A. 500
B. 346
C. 375
D. 433

22. A 45 m2 planting area receives groundcover at 0.30 m on center in a square grid. How many plants are needed?

A. 500
B. 450
C. 150
D. 577

23. Shrub beds totaling 120 m2 are to receive organic mulch 75 mm thick. What volume of mulch is needed?

A. 9.0 m3
B. 90.0 m3
C. 0.9 m3
D. 12.0 m3

24. A raised planter has inside dimensions of 3.0 m by 1.5 m and is filled with planting soil to a depth of 0.45 m. What soil volume is required?

A. 2.03 m3
B. 1.35 m3
C. 2.25 m3
D. 4.50 m3

25. When planting a balled-and-burlapped tree, where should the root flare be relative to finished grade?

A. At or slightly above grade
B. Exactly at the bottom of the pit
C. About 150 mm below grade
D. Buried under mulch to the first branch

26. A government park project requires a large native leguminous hardwood with fragrant yellow flowers that is the national tree of the Philippines. Which species fits?

A. Samanea saman
B. Pterocarpus indicus
C. Swietenia macrophylla
D. Gmelina arborea

27. A native-species reforestation buffer is being planted. Which of these trees is NOT native to the Philippines and should be excluded?

A. Narra
B. Molave
C. Big-leaf mahogany
D. Banaba

28. A plaza needs a broad umbrella-canopied shade tree whose leaflets fold up at dusk and before rain. Which species is described?

A. Samanea saman
B. Cassia fistula
C. Terminalia catappa
D. Delonix regia

29. A flowering street tree native to Madagascar bears masses of scarlet-orange blooms during the hot dry months. Which species is this?

A. Delonix regia
B. Lagerstroemia speciosa
C. Cassia fistula
D. Pterocarpus indicus

30. A coastal protection project will plant along an intertidal mudflat regularly flooded by seawater. Which genus is most suitable?

A. Rhizophora
B. Swietenia
C. Pterocarpus
D. Gmelina

31. In the binomial name Pterocarpus indicus, the word indicus is the

A. cultivar name
B. specific epithet
C. family name
D. genus name

32. Under accepted botanical naming conventions, how is a cultivar name written after the species name?

A. In all capitals after the family name
B. In parentheses after the author name
C. Capitalized, in single quotation marks
D. Lowercase and italicized like a species

33. A homeowner needs a year-round visual screen along a boundary to block a neighbor's windows. Which planting is most appropriate?

A. A low border of annual bedding plants
B. A dense evergreen hedge of adequate height
C. A row of deciduous flowering trees
D. Scattered ornamental grasses in clumps

34. A fruit tree is trained flat against a sunny wall with branches tied in a horizontal tiered pattern. This technique is called

A. topiary
B. pollarding
C. coppicing
D. espalier

35. A stand of trees is cut to near ground level every few years so that many new stems sprout from the stumps. This practice is

A. pollarding
B. topping
C. coppicing
D. crown thinning

36. When removing a large lateral branch, where should the final pruning cut be made?

A. Halfway along the branch
B. Just outside the branch collar
C. Flush with the trunk surface
D. Leaving a 300 mm stub

37. Street trees will be planted directly beneath overhead distribution power lines. Which selection criterion matters most?

A. Largest possible mature canopy
B. Fastest possible growth rate
C. Small mature height below the wires
D. Deepest taproot available

38. A single-row hedge 36 m long is planted at 0.45 m spacing, with a plant at each end. How many plants are needed?

A. 80
B. 81
C. 72
D. 90

39. A lawn of 850 m2 is to be seeded at 30 g per m2. How much seed is required?

A. 255 kg
B. 28.3 kg
C. 2.55 kg
D. 25.5 kg

40. In a water-efficient landscape, plants with similar water requirements are grouped together and served by the same irrigation zone. This practice is called

A. naturalizing
B. companion planting
C. hydrozoning
D. succession planting

Site Planning and Analysis

41. A walk rises 3.0 m over a horizontal distance of 40 m. What is its gradient?

A. 7.5%
B. 13.3%
C. 0.75%
D. 6.9%

42. On a topographic plan with a 0.5 m contour interval, two adjacent contours are 4.0 m apart horizontally. What is the slope between them?

A. 2.0%
B. 12.5%
C. 8.0%
D. 25.0%

43. A path measures 7.5 cm on a site plan drawn at 1:200. What is its actual length?

A. 150 m
B. 15 m
C. 37.5 m
D. 1.5 m

44. A lawn area measures 12 cm2 on a plan drawn at 1:500. What is its actual area?

A. 300 m2
B. 3,000 m2
C. 60 m2
D. 600 m2

45. Spot elevation A is 101.8 m and spot elevation B is 104.6 m, 35 m apart on a uniform slope. How far from A does the 103.0 m contour cross the line AB?

A. 20.0 m
B. 17.5 m
C. 12.5 m
D. 15.0 m

46. A residential lot in Metro Manila suffers heat gain on its patio in the late afternoon. Where should shade trees be placed for the greatest benefit?

A. Directly over the roof ridge
B. On the west side of the patio
C. On the north side of the patio
D. On the east side of the patio

47. A beach resort in western Luzon wants a windbreak against the strong wet-season winds of the habagat. On which side of the site should it be placed?

A. Southeast
B. Northeast
C. Southwest
D. Northwest

48. In site planning, what distinguishes site analysis from site inventory?

A. Analysis only records existing conditions
B. Analysis is the final construction drawing set
C. Analysis interprets data to judge suitability
D. Analysis replaces the need for a survey

49. A designer must locate an infiltration basin for stormwater. Based on soil texture alone, which soil is most favorable?

A. Sandy loam
B. Compacted clay loam
C. Silty clay
D. Heavy clay

50. A site lies within the 100-year floodplain. What is the probability that at least one such flood occurs during a 30-year design life?

A. About 30%
B. About 74%
C. About 1%
D. About 26%

51. On a contour map, a series of V-shaped contours whose points aim toward higher elevation indicates a

A. flat plateau
B. closed depression
C. valley or drainage channel
D. ridge or spur

52. During schematic design, loose circles connected by lines are drawn to show which spaces should be near each other. What is the main purpose of this diagram?

A. Show functional relationships
B. Compute earthwork quantities
C. Fix exact dimensions of spaces
D. Specify paving materials

53. A double-loaded parking bay has 90-degree stalls 2.5 m wide on both sides of a 50 m long aisle. How many stalls fit?

A. 40
B. 33
C. 20
D. 50

54. An accessible ramp must climb 0.75 m at a slope of 1:12. What horizontal length of ramp is needed, excluding landings?

A. 11.25 m
B. 6.0 m
C. 9.0 m
D. 7.5 m

55. In a dense city district, which landscape intervention most directly reduces the urban heat island effect at street level?

A. Replacing lawns with gravel
B. Installing more street lights
C. Adding dark asphalt parking
D. Expanding shade tree canopy

56. A 1,200 m2 lot has a permitted floor area ratio of 2.5. What maximum total gross floor area may be built?

A. 1,500 m2
B. 3,000 m2
C. 480 m2
D. 2,500 m2

57. A building footprint of 540 m2 sits on a 900 m2 lot. What is the building coverage?

A. 67%
B. 60%
C. 54%
D. 40%

58. A housing scheme places 180 dwelling units on 4.5 ha. What is the gross residential density?

A. 45 units per ha
B. 25 units per ha
C. 40 units per ha
D. 81 units per ha

59. Which slope orientation description identifies the compass direction a slope faces, important for sun exposure and microclimate?

A. Elevation
B. Relief
C. Aspect
D. Gradient

60. Early in a park project, the designer maps where views from a hilltop lookout are visible and what is hidden. This study is a

A. viewshed analysis
B. cut-and-fill analysis
C. traffic count study
D. soil suitability analysis

Landscape Construction, Grading and Drainage

61. A 0.6 ha paved area has a runoff coefficient of 0.85. Using the rational method with a rainfall intensity of 100 mm/h, what is the peak runoff?

A. 1.417 m3/s
B. 0.142 m3/s
C. 0.236 m3/s
D. 0.051 m3/s

62. A 1.0 ha catchment consists of 0.4 ha of roofs (C = 0.90) and 0.6 ha of lawn (C = 0.20). What is the weighted runoff coefficient?

A. 0.62
B. 0.55
C. 0.48
D. 0.34

63. A 300 mm diameter storm pipe flows full at a velocity of 1.2 m/s. What is its discharge?

A. 339 L/s
B. 113 L/s
C. 28.3 L/s
D. 84.8 L/s

64. Two cut cross-sections 20 m apart have areas of 12 m2 and 18 m2. By the average end area method, what is the cut volume?

A. 600 m3
B. 300 m3
C. 360 m3
D. 240 m3

65. A small level pad will be graded so cut and fill roughly balance. The existing corner elevations are 50.2, 51.0, 50.8 and 49.6 m. Which finished elevation is the best first estimate?

A. 50.60 m
B. 50.90 m
C. 50.20 m
D. 50.40 m

66. A contractor excavates 50 m3 of bank-measure soil with a swell factor of 25%. How many 6 m3 truckloads are needed to haul it away?

A. 8
B. 10
C. 9
D. 11

67. Garden steps must rise 1.20 m with equal risers not exceeding 160 mm. What is the minimum number of risers and their height?

A. 6 risers of 200 mm
B. 10 risers of 120 mm
C. 7 risers of 171 mm
D. 8 risers of 150 mm

68. Why are weep holes provided near the base of a masonry retaining wall?

A. To relieve water pressure behind the wall
B. To reduce the weight of the wall
C. To vent heat from the soil mass
D. To anchor the wall to the footing

69. Saw-cut grooves are made at intervals across a new concrete walk. What is their main purpose?

A. To provide slip resistance for users
B. To make cracks form at planned lines
C. To increase the slab's bearing capacity
D. To hold the edge forms in place

70. A concrete patio slab measures 4 m by 6 m and is 100 mm thick. What volume of concrete is required, ignoring waste?

A. 2.0 m3
B. 2.4 m3
C. 0.24 m3
D. 24 m3

71. A 36 m2 terrace uses 200 mm by 100 mm pavers laid tight. Allowing 5% for cutting and waste, how many pavers should be ordered?

A. 3,780
B. 1,890
C. 1,800
D. 1,980

72. What is the main stormwater benefit of using permeable interlocking pavers on a parking lot?

A. Pavers need no base course at all
B. Water is diverted faster to the street
C. The surface reflects all incoming sunlight
D. Runoff can infiltrate through the joints

73. Water seeps into a basement after rains because a planting bed slopes toward the building. What is the correct grading remedy?

A. Plant moisture-loving shrubs at the wall
B. Regrade so the ground falls away from the wall
C. Raise the bed so it holds more water
D. Add a level surface against the wall

74. A trench filled with gravel surrounding a perforated pipe, used to collect and carry away subsurface water, is called a

A. trench grate
B. grassed swale
C. dry well
D. French drain

75. Besides collecting surface water, what additional function does a catch basin with a sump perform?

A. Raises water pressure for irrigation
B. Traps sediment before it enters the pipes
C. Filters dissolved salts from runoff
D. Stores water for drinking supply

76. A drain pipe 45 m long is laid at a 1.0% slope. If the upstream invert is 98.20 m, what is the downstream invert?

A. 97.30 m
B. 97.85 m
C. 97.75 m
D. 98.65 m

77. An embankment is graded at 3H:1V. What is this slope expressed as a percentage?

A. 300%
B. 66.7%
C. 18.4%
D. 33.3%

78. A 250 m2 lawn needs 5 mm of water per day, and the irrigation system is 75% efficient. How much water must be applied daily?

A. 0.94 m3
B. 3.75 m3
C. 1.25 m3
D. 1.67 m3

79. In a well-designed spray irrigation layout, what is the usual head spacing relative to the throw radius?

A. Three times the radius, staggered
B. Half the radius, overlapping twice
C. Equal to the radius, head-to-head
D. Twice the radius, edge-to-edge

80. An irrigation zone delivers a total of 54 L/min over an area of 90 m2. What is its precipitation rate?

A. 0.6 mm/h
B. 21.6 mm/h
C. 60 mm/h
D. 36 mm/h

Landscape Ecology and Environmental Planning

81. In the patch-corridor-matrix model of landscape ecology, the most extensive and connected land cover that surrounds the patches is the

A. corridor
B. matrix
C. edge
D. mosaic

82. Two forest patches have the same area, one circular and one long and narrow. Which retains more interior habitat?

A. Whichever has more edge
B. Both retain the same amount
C. The circular patch
D. The long narrow patch

83. A square forest patch measures 400 m by 400 m, and edge effects penetrate 50 m inward from every side. How much interior habitat remains?

A. 8.0 ha
B. 16.0 ha
C. 9.0 ha
D. 12.25 ha

84. A chain of small woodlots is planted between two large forest reserves too far apart for a continuous corridor. These woodlots serve as

A. sinks that trap all migrating species
B. barriers that isolate the reserves
C. matrix that replaces the reserves
D. stepping stones for species movement

85. A vegetated strip is retained along both banks of a creek passing through farmland. Its main water-quality function is to

A. raise water temperature for fish
B. filter sediment and nutrients in runoff
C. replace the need for a stream bed
D. speed runoff into the stream channel

86. A fresh lava field with no soil is gradually colonized by lichens and mosses, then grasses and shrubs. This process is

A. ecological eutrophication
B. climax degradation
C. secondary succession
D. primary succession

87. A homeowner directs roof downspouts into a shallow planted depression with amended soil so that water soaks in within a day or two. This feature is a

A. reflecting pool
B. lined fish pond
C. rain garden
D. detention vault

88. A coastal lagoon next to a subdivision develops thick algal blooms and fish kills. Which cause is most likely?

A. Excessive shading by mangroves
B. Too much dissolved oxygen in water
C. Low nutrients from runoff
D. Excess nitrogen and phosphorus inputs

89. The Philippine eagle occurs in the wild only in the Philippines. Ecologically, such a species is described as

A. introduced
B. cosmopolitan
C. invasive
D. endemic

90. A protected-area manager sets a maximum number of daily hikers so that trails and habitat are not degraded. This applies the concept of

A. carrying capacity
B. trophic cascade
C. ecological succession
D. edge effect

91. According to island biogeography theory, which reserve would be expected to support the most species?

A. A large reserve far from any source
B. A small reserve far from any source
C. A large reserve close to a source area
D. A small reserve close to a source area

92. A city wants rooftop planting mainly to ease pressure on its storm drains. Which benefit of a green roof addresses this?

A. Retaining rainfall and delaying peak runoff
B. Increasing the roof's reflected glare
C. Raising rooftop surface temperatures
D. Removing the need for roof waterproofing

93. Plants are used on a former industrial site to absorb, stabilize or break down soil contaminants. This technique is called

A. bioaccumulation
B. hydroseeding
C. phytoremediation
D. soil solarization

94. Removing a single predator species from a reef triggers sharp changes throughout the whole community, out of proportion to its abundance. That predator is best described as a

A. keystone species
B. indicator species
C. pioneer species
D. exotic species

95. A freshwater wetland upstream of a town absorbs floodwaters and reduces flood peaks. In ecosystem-services terms, flood mitigation is a

A. cultural service
B. provisioning service
C. regulating service
D. supporting service

96. Which surface treatment of a large plaza would best lower daytime surface temperatures?

A. Light-colored high-albedo paving
B. Dark asphalt surfacing
C. Dark polished granite
D. Black rubber safety matting

97. Which law established the Philippine Environmental Impact Statement System, requiring environmental assessment for critical projects?

A. Presidential Decree No. 1096
B. Republic Act No. 8749
C. Presidential Decree No. 1586
D. Republic Act No. 9003

98. Which law established the National Integrated Protected Areas System in the Philippines?

A. Republic Act No. 7586
B. Republic Act No. 7279
C. Republic Act No. 9147
D. Republic Act No. 9275

99. A municipal water quality management plan for rivers and bays falls primarily under which Philippine law?

A. Philippine Clean Air Act (RA 8749)
B. Philippine Clean Water Act (RA 9275)
C. Building Code (PD 1096)
D. Wildlife Act (RA 9147)

100. All the land from which rainfall drains to a single outlet point on a river is called its

A. estuary
B. aquifer
C. watershed
D. floodway

Professional Practice, Laws and Ethics

101. Which law regulates the practice of landscape architecture in the Philippines?

A. Republic Act No. 544
B. Republic Act No. 9266
C. Presidential Decree No. 1096
D. Republic Act No. 9053

102. A park design must provide ramps, accessible parking and barrier-free routes for persons with disabilities. Which Philippine law primarily mandates these?

A. Republic Act No. 7586
B. Batas Pambansa Blg. 344
C. Presidential Decree No. 957
D. Republic Act No. 9003

103. Which law is the National Building Code of the Philippines?

A. Presidential Decree No. 1586
B. Batas Pambansa Blg. 220
C. Presidential Decree No. 1096
D. Republic Act No. 9275

104. A barangay park design includes a composting area and segregated bins for biodegradable and recyclable waste. Which law sets the framework for this?

A. Republic Act No. 9003
B. Republic Act No. 9147
C. Republic Act No. 10066
D. Republic Act No. 8749

105. A landscape architect is commissioned to redesign the grounds of a declared historic site. Which law governs the protection of such cultural property?

A. Republic Act No. 10066
B. Republic Act No. 7279
C. Republic Act No. 9275
D. Republic Act No. 9184

106. In a set of contract documents, which part chiefly describes the required quality of materials, workmanship and installation methods?

A. The site plan drawings
B. The bill of quantities
C. The notice of award
D. The technical specifications

107. During construction the owner decides to replace the specified granite paving with a different stone, adjusting cost and time. The document used to authorize this is a

A. certificate of completion
B. notice to proceed
C. change order
D. punch list

108. A contractor's progress billing is PHP 1,250,000, and the contract stipulates 10% retention. How much is paid for this billing?

A. PHP 125,000
B. PHP 1,240,000
C. PHP 1,125,000
D. PHP 1,375,000

109. A design fee is set at 7% of a PHP 4,200,000 project cost, and the schematic design phase is worth 20% of the fee. How much is due for schematic design?

A. PHP 58,800
B. PHP 84,000
C. PHP 294,000
D. PHP 840,000

110. Under RA 9184, the Government Procurement Reform Act, a public landscape construction contract is awarded to the bidder with the

A. earliest submitted proposal
B. highest technical score only
C. lowest calculated responsive bid
D. longest years in business

111. While preparing specifications, a landscape architect is offered a commission by a nursery if its plants are specified. What is the ethical course of action?

A. Pass the commission on to the contractor
B. Decline it and avoid the conflict
C. Accept it and specify only that nursery
D. Accept it without telling the client

112. A client wants to reuse a landscape architect's drawings for a second site without consent or added fee. Under common professional practice, the drawings are

A. instruments of service owned by the designer
B. public documents free for any use
C. owned by the local building official
D. property of the contractor who built it

113. Bidders are given an itemized list of work items with measured quantities and asked to price each item. This document is the

A. invitation to bid
B. bill of quantities
C. performance bond
D. general conditions

114. Sod material costs PHP 120 per m2, and labor and overhead add 15%. What is the estimated cost for 350 m2?

A. PHP 6,300
B. PHP 49,500
C. PHP 42,000
D. PHP 48,300

115. Activity A takes 5 days. B (3 days) and C (4 days) both start after A. D (2 days) starts after both B and C. What is the project duration?

A. 9 days
B. 11 days
C. 10 days
D. 14 days

116. After construction, the contractor submits drawings that record the work as actually built, including field changes. These are called

A. shop drawings
B. schematic drawings
C. tender drawings
D. as-built drawings

117. At substantial completion, the landscape architect inspects the site and lists minor items that must still be corrected. This list is the

A. punch list
B. change order
C. scope of work
D. bid bulletin

118. What does a performance bond posted by a contractor protect the owner against?

A. Design errors by the consultant
B. Price increases in nursery stock
C. Injury to members of the public
D. Failure to complete the work as contracted

119. Why does a registered landscape architect sign and seal landscape plans submitted to authorities?

A. To register the land title with the plan
B. To take professional responsibility for them
C. To transfer liability to the contractor
D. To show the client has paid the fee

120. The owner issues a written instruction to the contractor authorizing work to begin on a stated date, from which contract time is counted. This document is the

A. certificate of payment
B. notice to proceed
C. notice of award
D. bid evaluation report

Answer key

Landscape Architecture

1. B. Charbagh

The charbagh is the Persian and Mughal four-part garden divided by axial water channels, representing the four rivers of paradise.

2. D. Frederick Law Olmsted

Olmsted and Vaux submitted the Greensward Plan in 1858, and Olmsted is widely regarded as the founder of American landscape architecture.

3. C. Andre Le Notre

Andre Le Notre designed Versailles and Vaux-le-Vicomte, defining the French formal garden of the 17th century.

4. C. A ha-ha, a sunken wall and ditch

The ha-ha is a retaining wall set in a ditch, forming a barrier invisible from the house so the lawn appears to merge with the park.

5. A. karesansui

Karesansui is the Japanese dry landscape garden in which gravel and stone represent water and mountains.

6. B. Villa d'Este

Villa d'Este at Tivoli is the classic Italian Renaissance water garden, using gravity-fed water from the Aniene river for its fountains.

7. B. The Alhambra

The Alhambra in Granada, Spain, is the best-known surviving example of Islamic palace gardens in Europe, including the Court of the Lions.

8. D. Ian McHarg

Ian McHarg's Design with Nature (1969) promoted overlaying transparent maps of natural factors to find land most suitable for each use.

9. A. node

Nodes are strategic focal points such as junctions and squares that people enter; landmarks are external reference points viewed from outside.

10. C. Shakkei, or borrowed scenery

Shakkei incorporates distant landscape features into the garden composition by framing them with foreground elements.

11. D. Daniel Burnham

Daniel Burnham prepared the plans for Manila and Baguio around 1905, applying City Beautiful principles.

12. A. Lancelot Capability Brown

Capability Brown's 18th-century English landscape parks are known for serpentine lakes, open lawns, tree clumps and boundary belts.

13. D. Rhythm

Regular repetition of an element at consistent intervals produces rhythm and leads the eye along the route.

14. A. informal or asymmetric balance

Unequal elements balanced by comparable visual weight on either side of an axis create informal, or asymmetric, balance.

15. C. Cool blues and violets at the far end

Cool colors appear to recede while warm colors appear to advance, so cool hues at the back increase the perceived depth.

16. B. 18.5 m

The golden ratio is about 1.618, so width = 30 / 1.618 = 18.5 m.

17. A. Gertrude Jekyll

Gertrude Jekyll developed color-graded herbaceous borders and worked with architect Edwin Lutyens on many Arts and Crafts gardens.

18. A. Thomas Church

Thomas Church designed the Donnell Garden (1948) and wrote Gardens Are for People, shaping the California modernist garden.

19. D. Roberto Burle Marx

Roberto Burle Marx designed the Copacabana promenade, known for its bold abstract paving patterns and tropical planting.

20. D. Prospect-refuge theory

Jay Appleton's prospect-refuge theory holds that people favor places where they can see out widely while feeling protected.

21. D. 433

Each plant occupies 0.866 x 0.40^2 = 0.1386 m2 in triangular spacing, so 60 / 0.1386 = 433 plants.

22. A. 500

Each plant covers 0.30 x 0.30 = 0.09 m2, so 45 / 0.09 = 500 plants.

23. A. 9.0 m3

Volume = 120 m2 x 0.075 m = 9.0 m3.

24. A. 2.03 m3

Volume = 3.0 x 1.5 x 0.45 = 2.025 m3, about 2.03 m3.

25. A. At or slightly above grade

Setting the root flare at or slightly above grade prevents trunk rot and girdling problems caused by planting too deep.

26. B. Pterocarpus indicus

Narra (Pterocarpus indicus) is the Philippine national tree, a native leguminous hardwood with yellow blossoms.

27. C. Big-leaf mahogany

Big-leaf mahogany (Swietenia macrophylla) originates in tropical America; narra, molave and banaba are native.

28. A. Samanea saman

Rain tree (Samanea saman) has a wide spreading crown and leaflets that close at night and in overcast weather.

29. A. Delonix regia

Fire tree or caballero (Delonix regia) is native to Madagascar and known for brilliant red-orange flowers in the dry season.

30. A. Rhizophora

Rhizophora (bakawan) is a true mangrove with prop roots adapted to saline, tidally flooded mud.

31. B. specific epithet

A binomial combines the genus (Pterocarpus) and the specific epithet (indicus); together they name the species.

32. C. Capitalized, in single quotation marks

Cultivar names are capitalized, not italicized, and enclosed in single quotation marks.

33. B. A dense evergreen hedge of adequate height

Evergreen plants retain foliage all year, and a dense hedge of suitable height gives continuous screening.

34. D. espalier

Espalier trains plants in a flat plane against a wall or trellis, often in formal patterns.

35. C. coppicing

Coppicing cuts stems at ground level to stimulate multiple regrowth; pollarding cuts at a height above browsing level.

36. B. Just outside the branch collar

Cutting just outside the branch collar preserves the tissue that seals the wound; flush cuts and stubs promote decay.

37. C. Small mature height below the wires

Choosing species whose mature height stays below the conductors avoids repeated heavy pruning and line conflicts.

38. B. 81

Number of spaces = 36 / 0.45 = 80, and plants = spaces + 1 = 81.

39. D. 25.5 kg

Seed = 850 x 30 g = 25,500 g = 25.5 kg.

40. C. hydrozoning

Hydrozoning groups plants by water need so each zone can be irrigated appropriately, reducing waste.

41. A. 7.5%

Slope = rise / run x 100 = 3.0 / 40 x 100 = 7.5%.

42. B. 12.5%

Slope = 0.5 / 4.0 x 100 = 12.5%.

43. B. 15 m

At 1:200, 7.5 cm represents 7.5 x 200 = 1,500 cm = 15 m.

44. A. 300 m2

At 1:500, 1 cm = 5 m, so 1 cm2 = 25 m2 and 12 x 25 = 300 m2.

45. D. 15.0 m

Distance = (103.0 - 101.8) / (104.6 - 101.8) x 35 = 1.2 / 2.8 x 35 = 15.0 m.

46. B. On the west side of the patio

Low afternoon sun comes from the west, so west-side shade trees intercept the hottest solar gain.

47. C. Southwest

The habagat is the southwest monsoon, so a windbreak on the southwest side intercepts it.

48. C. Analysis interprets data to judge suitability

The inventory collects and maps existing data; the analysis evaluates that data to identify opportunities and constraints.

49. A. Sandy loam

Coarse-textured soils such as sandy loam have high infiltration rates, while clays drain slowly.

50. D. About 26%

A 100-year flood has a 1% annual chance, so P = 1 - 0.99^30 = 0.26, about 26%.

51. C. valley or drainage channel

Contours crossing a valley bend upstream, so the Vs point uphill; on a ridge they point downhill.

52. A. Show functional relationships

A bubble diagram explores functional adjacencies and circulation before committing to exact form or size.

53. A. 40

Each side holds 50 / 2.5 = 20 stalls, so both sides give 40 stalls.

54. C. 9.0 m

At 1:12, run = 0.75 x 12 = 9.0 m.

55. D. Expanding shade tree canopy

Tree canopy shades surfaces and cools air by evapotranspiration, lowering surface and air temperatures.

56. B. 3,000 m2

Gross floor area = FAR x lot area = 2.5 x 1,200 = 3,000 m2.

57. B. 60%

Coverage = 540 / 900 x 100 = 60%.

58. C. 40 units per ha

Density = 180 / 4.5 = 40 dwelling units per hectare.

59. C. Aspect

Aspect is the direction a slope faces; gradient is its steepness.

60. A. viewshed analysis

A viewshed analysis identifies the areas visible from, or that can see, a given vantage point.

61. B. 0.142 m3/s

Q = CiA / 360 = 0.85 x 100 x 0.6 / 360 = 0.142 m3/s.

62. C. 0.48

C = (0.4 x 0.90 + 0.6 x 0.20) / 1.0 = (0.36 + 0.12) / 1.0 = 0.48.

63. D. 84.8 L/s

Q = AV = (pi x 0.15^2) x 1.2 = 0.0707 x 1.2 = 0.0848 m3/s = 84.8 L/s.

64. B. 300 m3

V = (12 + 18) / 2 x 20 = 300 m3.

65. D. 50.40 m

The average of the corners is (50.2 + 51.0 + 50.8 + 49.6) / 4 = 50.40 m, a first estimate of the balance grade.

66. D. 11

Loose volume = 50 x 1.25 = 62.5 m3, and 62.5 / 6 = 10.4, so 11 trips.

67. D. 8 risers of 150 mm

1.20 / 0.16 = 7.5, rounded up to 8 risers, each 1,200 / 8 = 150 mm.

68. A. To relieve water pressure behind the wall

Weep holes drain water from the backfill, preventing hydrostatic pressure from building up against the wall.

69. B. To make cracks form at planned lines

Control joints weaken the slab at chosen lines so shrinkage cracks occur there rather than randomly.

70. B. 2.4 m3

V = 4 x 6 x 0.10 = 2.4 m3.

71. B. 1,890

One paver covers 0.02 m2, so 50 per m2; 36 x 50 = 1,800, plus 5% = 1,890.

72. D. Runoff can infiltrate through the joints

Permeable pavers let water pass through joints into an open-graded base, reducing runoff volume and peak flow.

73. B. Regrade so the ground falls away from the wall

Positive drainage requires finished grade to slope away from foundations so surface water moves off the building.

74. D. French drain

A French drain intercepts groundwater in a gravel-filled trench and conveys it through a perforated pipe.

75. B. Traps sediment before it enters the pipes

The sump below the outlet lets sediment and debris settle out, protecting downstream pipes from clogging.

76. C. 97.75 m

Drop = 45 x 0.01 = 0.45 m, so the downstream invert = 98.20 - 0.45 = 97.75 m.

77. D. 33.3%

Percent slope = 1 / 3 x 100 = 33.3%.

78. D. 1.67 m3

Net need = 250 x 0.005 = 1.25 m3, and gross = 1.25 / 0.75 = 1.67 m3.

79. C. Equal to the radius, head-to-head

Head-to-head spacing places each sprinkler so it throws to the adjacent heads, giving even coverage.

80. D. 36 mm/h

PR = 54 L/min x 60 / 90 m2 = 36 L/m2 per hour = 36 mm/h.

81. B. matrix

The matrix is the dominant background land cover, within which patches and corridors are embedded.

82. C. The circular patch

A circle has the lowest perimeter-to-area ratio, so less of its area falls within the edge-affected zone.

83. C. 9.0 ha

The interior square is 400 - 2 x 50 = 300 m wide, so 300 x 300 = 90,000 m2 = 9.0 ha.

84. D. stepping stones for species movement

Stepping stones are small patches that let organisms move between larger habitats when a continuous corridor is not possible.

85. B. filter sediment and nutrients in runoff

Riparian buffers slow overland flow and trap sediment, nitrogen and phosphorus before they reach the stream.

86. D. primary succession

Primary succession begins on newly exposed surfaces lacking soil; secondary succession follows disturbance where soil remains.

87. C. rain garden

A rain garden is a vegetated depression that captures and infiltrates runoff from roofs and paving.

88. D. Excess nitrogen and phosphorus inputs

Nutrient loading from fertilizers and wastewater drives eutrophication, causing algal blooms that deplete oxygen.

89. D. endemic

An endemic species is native to and restricted to a particular geographic area.

90. A. carrying capacity

Carrying capacity is the level of use an area can sustain without unacceptable ecological or experiential impacts.

91. C. A large reserve close to a source area

MacArthur and Wilson showed that species richness rises with island size and falls with distance from a colonizing source.

92. A. Retaining rainfall and delaying peak runoff

Green roof substrate and plants hold rainfall and release it slowly, reducing runoff volume and peak flow.

93. C. phytoremediation

Phytoremediation uses plants and their associated microbes to remove, contain or degrade pollutants.

94. A. keystone species

A keystone species has an effect on community structure far greater than its abundance would suggest.

95. C. regulating service

Regulating services are benefits from ecosystem processes such as flood control, climate regulation and water purification.

96. A. Light-colored high-albedo paving

High-albedo surfaces reflect more solar radiation and absorb less heat than dark materials.

97. C. Presidential Decree No. 1586

PD 1586 (1978) established the Philippine EIS System; RA 9003 covers solid waste, RA 8749 clean air, PD 1096 the building code.

98. A. Republic Act No. 7586

RA 7586 (1992) is the NIPAS Act; RA 9147 is the wildlife act, RA 9275 the Clean Water Act and RA 7279 the urban housing act.

99. B. Philippine Clean Water Act (RA 9275)

RA 9275, the Philippine Clean Water Act of 2004, provides for water quality management of all water bodies.

100. C. watershed

A watershed, or catchment, is the area contributing surface runoff to a common outlet.

101. D. Republic Act No. 9053

RA 9053 is the Philippine Landscape Architecture Act of 2001; RA 9266 covers architecture and RA 544 civil engineering.

102. B. Batas Pambansa Blg. 344

BP 344, the Accessibility Law, requires facilities for persons with disabilities in buildings and public places.

103. C. Presidential Decree No. 1096

PD 1096 (1977) is the National Building Code; PD 1586 is the EIS System and BP 220 covers economic housing standards.

104. A. Republic Act No. 9003

RA 9003, the Ecological Solid Waste Management Act of 2000, mandates segregation at source and composting.

105. A. Republic Act No. 10066

RA 10066, the National Cultural Heritage Act of 2009, protects and conserves declared cultural properties.

106. D. The technical specifications

Specifications state the qualitative requirements for products and execution; drawings show quantity, location and arrangement.

107. C. change order

A change order is a written agreement modifying the work, contract sum or time after the contract is signed.

108. C. PHP 1,125,000

Retention = 0.10 x 1,250,000 = 125,000, so payment = 1,250,000 - 125,000 = 1,125,000.

109. A. PHP 58,800

Fee = 0.07 x 4,200,000 = 294,000, and 20% of that is 58,800.

110. C. lowest calculated responsive bid

RA 9184 awards infrastructure contracts to the bidder with the lowest calculated and responsive bid after post-qualification.

111. B. Decline it and avoid the conflict

Accepting undisclosed benefits from suppliers creates a conflict of interest and betrays the client's trust.

112. A. instruments of service owned by the designer

Drawings and specifications are instruments of service; the designer retains copyright, and reuse elsewhere needs permission.

113. B. bill of quantities

A bill of quantities lists work items and quantities so bids can be priced on a common basis.

114. D. PHP 48,300

Material = 350 x 120 = 42,000, and with 15% added, 42,000 x 1.15 = 48,300.

115. B. 11 days

The longest path is A-C-D: 5 + 4 + 2 = 11 days; A-B-D is only 10 days.

116. D. as-built drawings

As-built drawings document the final constructed condition; shop drawings are prepared before fabrication.

117. A. punch list

A punch list records incomplete or defective items to be fixed before final acceptance and payment.

118. D. Failure to complete the work as contracted

A performance bond guarantees that the surety will cover the owner's loss if the contractor defaults on the contract.

119. B. To take professional responsibility for them

The seal and signature identify the licensed professional who prepared the documents and accepts responsibility for them.

120. B. notice to proceed

The notice to proceed sets the start date of the contract time; the notice of award comes earlier and informs the winning bidder.

Topics to review

• Site inventory and design development

• Plant selection and planting plans

• Grading, drainage and hardscape details

• Landscape ecology and professional practice

Online question banks and study resources

Landscape Architecture - Pass Harbor (Question bank)

Official PRC board information

Current PRC exam programs

Independent study material prepared by Board Exam Desk.