Board Exam Desk

# Environmental Planning Reviewer

Environmental Planning Licensure Examination | PRC | 120 original questions

2026 Edition | Updated November 2026

Original board-style practice questions with an answer key.

## Practice questions

### History, Concepts, Theories and Principles of Planning

**1. A city planning officer argues that since complete information is never available, the city should make small, successive policy adjustments negotiated among interest groups rather than one grand plan. Which planning approach is being advocated?**

A. Transactive planning
B. Rational comprehensive planning
C. Advocacy planning
D. Disjointed incrementalism

**2. A provincial planning office first reviews all development options at a broad, low-detail level, then studies in depth only the few areas flagged as critical. This approach is best described as**

A. Mixed scanning
B. Equity planning
C. Disjointed incrementalism
D. Blueprint planning

**3. A planner hired by a federation of informal settlers prepares an alternative redevelopment plan to counter the city's official proposal at public hearings. This practice is called**

A. Advocacy planning
B. Mixed scanning
C. Trend planning
D. Incremental planning

**4. A planner sees her role mainly as a facilitator who builds consensus through structured dialogue among residents, businesses and agencies. Which theory frames this role?**

A. Communicative or collaborative planning
B. Rational comprehensive planning
C. Systems engineering planning
D. Physical determinism

**5. Residents are invited to consultations where they may voice opinions on a draft plan, but officials keep full authority to ignore their input. On Arnstein's ladder, this falls under**

A. Tokenism
B. Delegated control
C. Citizen power
D. Nonparticipation

**6. On Arnstein's ladder of citizen participation, which rung represents residents holding full managerial control over a program or institution?**

A. Delegated power
B. Citizen control
C. Partnership
D. Placation

**7. A land use survey finds a central business district surrounded by a deteriorating zone in transition, then successive rings of workers' and middle-class housing. Which model fits?**

A. Sector model
B. Central place model
C. Multiple nuclei model
D. Concentric zone model

**8. High-income housing in a city extends outward as a wedge along a major railway and avenue, while industry forms its own wedge along the river. This pattern best matches the**

A. Sector model
B. Concentric zone model
C. Multiple nuclei model
D. Bid-rent ring model

**9. A metropolitan area has grown around several separate centers: an old port, a university town, an airport complex and a newer business district. Which model explains this structure?**

A. Rank-size model
B. Concentric zone model
C. Sector model
D. Multiple nuclei model

**10. In central place theory, the minimum number of customers needed to keep a store or service economically viable is called the**

A. Hinterland
B. Threshold
C. Range
D. Market fringe

**11. In Christaller's central place theory, what geometric shape do market areas take so that the whole plain is served without gaps or overlaps?**

A. Circles
B. Triangles
C. Squares
D. Hexagons

**12. In von Thunen's model of agricultural land use around an isolated market town, which activity occupies the ring closest to the market?**

A. Extensive grain farming
B. Forestry for fuel and timber
C. Livestock ranching
D. Market gardening and dairying

**13. A cement plant uses limestone that loses much of its weight during processing. According to Weber's least-cost theory, where should the plant tend to locate?**

A. Near the consumer market
B. Near the largest labor pool
C. Midway between source and market
D. Near the limestone source

**14. A proposal calls for a self-contained town of limited population, surrounded by a permanent agricultural belt, with land held in common and increases in land value returned to the community. This is the concept of**

A. Frank Lloyd Wright's Broadacre City
B. Ebenezer Howard's Garden City
C. Le Corbusier's Radiant City
D. Soria y Mata's Linear City

**15. A residential area is planned around an elementary school within walking distance of all homes, with arterial roads routed along its edges rather than through it. This follows the**

A. Garden suburb model
B. Planned unit development
C. Radburn superblock idea
D. Neighborhood unit concept

**16. A subdivision separates pedestrian paths from vehicle roads, groups houses on cul-de-sacs and faces them toward interior parks. Which planning precedent does this follow?**

A. The Linear City concept
B. The Radburn plan by Stein and Wright
C. The Ekistics grid
D. The City Beautiful movement

**17. Which American architect and planner prepared the early twentieth-century plans for Manila and Baguio?**

A. Clarence Stein
B. Daniel Burnham
C. Patrick Geddes
D. Frederick Law Olmsted

**18. Which biologist-planner insisted on the sequence of survey, analysis and plan, and coined the term 'conurbation'?**

A. Raymond Unwin
B. Patrick Geddes
C. Ebenezer Howard
D. Lewis Mumford

**19. In a mental mapping study, residents describe a river and an elevated expressway as lines that divide their neighborhoods. In Kevin Lynch's framework, these are**

A. Paths
B. Edges
C. Nodes
D. Districts

**20. Which critic of large-scale urban renewal argued that lively streets need mixed primary uses, short blocks, buildings of varying age and a dense concentration of people?**

A. Robert Moses
B. Ian McHarg
C. Jane Jacobs
D. Le Corbusier

**21. Land suitable for development is identified by overlaying transparent maps of slope, soils, drainage, vegetation and wildlife habitat. Who popularized this method?**

A. Kevin Lynch
B. Ian McHarg
C. Constantinos Doxiadis
D. Walter Christaller

**22. Constantinos Doxiadis called his proposed science of human settlements**

A. Conurbation theory
B. Urban ecology
C. Ekistics
D. Ecumenopolis studies

**23. Which 1987 report popularized defining sustainable development as meeting present needs without compromising the ability of future generations to meet theirs?**

A. The New Urban Agenda
B. The Limits to Growth
C. Agenda 21
D. Our Common Future

**24. A country's investment rate climbs sharply, a few manufacturing sectors grow rapidly, and political institutions begin to support sustained growth. In Rostow's model, this stage is the**

A. Age of high mass consumption
B. Take-off
C. Preconditions for take-off
D. Drive to maturity

**25. A regional plan concentrates investment in a cluster of propulsive industries in one city, expecting benefits to spread later to the surrounding hinterland. Which theory underlies this strategy?**

A. Growth pole theory
B. Agropolitan development
C. Dependency theory
D. Basic needs approach

**26. Skilled workers and capital steadily leave lagging provinces for the metropolitan core, widening regional disparity. Myrdal called this process**

A. Spread effects
B. Trickle-down effects
C. Backwash effects
D. Filtering effects

**27. A country's largest city is several times the size of the second-largest and dominates national economic and political life. This condition is called**

A. Rank-size regularity
B. Conurbation
C. Counter-urbanization
D. Urban primacy

**28. Planning problems that lack a definitive formulation, have no stopping rule, and whose solutions are better or worse rather than true or false are known as**

A. Tame problems
B. Free-rider problems
C. Externality problems
D. Wicked problems

**29. Each fisher in an open-access bay catches more to maximize personal gain until fish stocks collapse for everyone. This outcome illustrates the**

A. Tragedy of the commons
B. Dutch disease
C. Filtering process
D. NIMBY syndrome

**30. A design proposes widely spaced high-rise towers set in large open parks, with separated highways and very high residential densities. This reflects**

A. Wright's Broadacre City
B. Howard's Garden City
C. Perry's neighborhood unit
D. Le Corbusier's Radiant City

## Planning Methods and Techniques

**31. A town had 84,000 residents in 2010 and 96,000 in 2020. Using the arithmetic (linear) method, what is the projected population in 2035?**

A. 120,000
B. 117,290
C. 114,000
D. 108,000

**32. A municipality grew from 50,000 to 61,000 residents over 10 years. Assuming geometric growth, what is the average annual growth rate?**

A. 2.44%
B. 1.22%
C. 2.20%
D. 2.01%

**33. A city of 120,000 grows continuously at 2.5% per year. Using the exponential model P = P0 e^(rt), what is the population after 8 years (nearest whole number)?**

A. 150,000
B. 146,568
C. 146,208
D. 144,000

**34. Using the rule of 70, about how many years will a population growing at 1.75% per year take to double?**

A. 70 years
B. 35 years
C. 40 years
D. 57 years

**35. A town of 18,000 people covers 450 ha, of which 240 ha are in residential use. What is its net residential density?**

A. 75 persons per hectare
B. 100 persons per hectare
C. 40 persons per hectare
D. 50 persons per hectare

**36. A 1,200 m2 lot has a maximum floor area ratio of 4.0 and a maximum building coverage of 60%. If every floor uses the full allowed footprint, how many full storeys can be built?**

A. 7 storeys
B. 8 storeys
C. 6 storeys
D. 4 storeys

**37. An 8-storey building has a floor plate of 500 m2 on every level and stands on a 1,600 m2 lot. What is its floor area ratio?**

A. 3.2
B. 2.0
C. 2.5
D. 0.31

**38. A city has 6,000 tourism jobs out of 80,000 total jobs. Its region has 30,000 tourism jobs out of 1,000,000 total jobs. What is the city's location quotient for tourism?**

A. 2.5
B. 0.4
C. 7.5
D. 1.5

**39. A town's location quotient for manufacturing employment is 0.6 relative to the region. The best interpretation is that manufacturing**

A. grew by 0.6% a year during the period
B. employs 60% of the town's total workforce
C. is less concentrated locally than in the region
D. mainly exports its output outside the town

**40. A city has 50,000 total jobs, of which 12,500 are basic (export) jobs. If a new plant adds 1,000 basic jobs, what total employment change does the economic base multiplier predict?**

A. 4,000 jobs
B. 3,000 jobs
C. 1,000 jobs
D. 5,000 jobs

**41. In shift-share analysis, which component measures local employment growth due to the region's own competitive advantage in an industry?**

A. Regional (competitive) shift
B. National growth share
C. Industry mix component
D. Location quotient effect

**42. City A (400,000 people) and City B (100,000 people) are 60 km apart. Using Reilly's law of retail gravitation, how far from City B is the trade area breaking point?**

A. 30 km
B. 20 km
C. 40 km
D. 15 km

**43. A province has 33,000 people aged 0-14, 60,000 aged 15-64 and 7,000 aged 65 and over. What is its total dependency ratio?**

A. 40.0
B. 150.0
C. 55.0
D. 66.7

**44. A municipality has 51,300 males and 48,700 females. What is its sex ratio?**

A. 94.9
B. 105.3
C. 102.6
D. 51.3

**45. A city recorded 2,640 live births in a year with a midyear population of 120,000. What is its crude birth rate?**

A. 22 per 1,000
B. 18 per 1,000
C. 2.2 per 1,000
D. 220 per 1,000

**46. A town had 75,000 residents at the start of a year and 77,500 at its end. During the year there were 1,800 births and 600 deaths. What was the net migration?**

A. +2,500
B. +1,200
C. +3,700
D. +1,300

**47. A household survey divides barangays into urban and rural groups and randomly samples households from each group in proportion to its population. This design is**

A. Stratified random sampling
B. Cluster sampling
C. Purposive sampling
D. Systematic sampling

**48. A study team randomly selects 8 of a city's 60 barangays and then interviews every household in those 8 barangays. This design is**

A. Cluster sampling
B. Stratified random sampling
C. Quota sampling
D. Snowball sampling

**49. To forecast future tourism demand, a planner sends questionnaires to a panel of anonymous experts over several rounds, sharing summarized responses after each round until opinions converge. This is the**

A. Focus group discussion
B. Nominal group technique
C. Charrette method
D. Delphi technique

**50. In a SWOT analysis for a municipality, a newly approved national expressway with an interchange near the town proper is best classified as**

A. A threat
B. An opportunity
C. A strength
D. A weakness

**51. A project costs PHP 10 million now and yields benefits of PHP 3 million at the end of each year for 5 years. At a 10% discount rate, what is its net present value?**

A. PHP 5.00 million
B. PHP -0.49 million
C. PHP 11.37 million
D. PHP 1.37 million

**52. A flood control project has a present value of benefits of PHP 18 million and a present value of costs of PHP 15 million. What is its benefit-cost ratio and implication?**

A. 1.20, economically unacceptable
B. 1.20, economically acceptable
C. 0.83, economically unacceptable
D. 3.00, economically acceptable

**53. For a PERT activity, the optimistic time is 4 weeks, the most likely time is 7 weeks and the pessimistic time is 16 weeks. What is its expected duration?**

A. 9 weeks
B. 8 weeks
C. 7 weeks
D. 10 weeks

**54. Activities A (3 weeks) and B (5 weeks) start together. C (4 weeks) follows A, D (4 weeks) follows B, and E (3 weeks) starts after both C and D finish. What is the minimum project duration?**

A. 12 weeks
B. 19 weeks
C. 15 weeks
D. 10 weeks

**55. A study finds a correlation coefficient of r = -0.85 between distance from the CBD and residential land price. The best interpretation is**

A. proof that distance causes lower prices
B. a weak negative linear relationship
C. a strong negative linear relationship
D. a strong positive linear relationship

**56. A planner wants to test whether housing tenure status (owner, renter, informal) is associated with willingness to relocate (yes or no). Which statistical test is most appropriate?**

A. Simple linear regression
B. Chi-square test of independence
C. Pearson correlation coefficient
D. Paired-samples t-test

**57. Residents rated a park on a five-point scale from 'very dissatisfied' to 'very satisfied'. Treating the data strictly as ordinal, which measure of central tendency is most appropriate?**

A. Median
B. Harmonic mean
C. Arithmetic mean
D. Geometric mean

**58. A GIS analyst combines raster layers of slope, flood susceptibility and road access, each assigned a weight, to rank land by development suitability. This operation is**

A. Geocoding
B. Weighted overlay analysis
C. Network analysis
D. Buffer analysis

**59. To count the households that would fall within 500 m of a proposed sanitary landfill, which GIS operation should the planner run first around the site boundary?**

A. Weighted overlay analysis
B. Interpolation
C. Network analysis
D. Buffer analysis

**60. According to the rank-size rule, if a country's largest city has 3.6 million residents, what is the expected population of its fourth-ranked city?**

A. 1.80 million
B. 0.45 million
C. 0.90 million
D. 1.20 million

## Land Use, Environmental and Sectoral Planning

**61. A municipal planning team has been organized and its stakeholders identified. In the logical sequence of comprehensive land use planning, which of these tasks should come next?**

A. Holding the zoning public hearing
B. Drafting the zoning ordinance
C. Formulating the vision
D. Monitoring plan implementation

**62. Which local instrument translates the land use plan of a CLUP into legally enforceable regulations on the use of specific parcels?**

A. Comprehensive development plan
B. Executive order
C. Zoning ordinance
D. Annual investment program

**63. A city adds extra building requirements, such as raised floor levels, to all base zones that fall within a mapped flood-prone area. This technique is**

A. An overlay zone
B. Spot zoning
C. A floating zone
D. Downzoning

**64. A zoning ordinance describes a planned unit development district in its text but assigns it to no location until a developer applies and the council approves a specific site. This is a**

A. Floating zone
B. Buffer zone
C. Holding zone
D. Overlay zone

**65. The council rezones a single small lot in the middle of a residential district to commercial use solely to benefit its owner, contrary to the CLUP. This practice is**

A. Spot zoning
B. Cluster zoning
C. Inclusionary zoning
D. Incentive zoning

**66. A developer is allowed extra floor area beyond the base limit in exchange for providing a public plaza at ground level. This is an example of**

A. Performance zoning
B. Euclidean zoning
C. Incentive zoning
D. Exclusionary zoning

**67. Owners of heritage buildings in a historic district are allowed to sell their unused development potential to developers building in a designated growth area. This tool is**

A. Special assessment
B. Land readjustment
C. Transfer of development rights
D. Eminent domain

**68. An ordinance requires every new subdivision above a set size to make a share of its units affordable to low-income households. This approach is called**

A. Spot zoning
B. Inclusionary zoning
C. Exclusionary zoning
D. Overlay zoning

**69. On a 10-ha site, a developer groups all houses on 6 ha and keeps the remaining 4 ha as shared open space, without exceeding the overall density allowed. This is**

A. Ribbon development
B. Cluster development
C. Leapfrog development
D. Strip development

**70. A rice mill was operating lawfully before its area was zoned residential by a new ordinance. Under zoning practice, the mill is classified as a**

A. Spot zone
B. Conditional rezoning
C. Variance
D. Nonconforming use

**71. Because of a lot's unusual triangular shape, its owner cannot meet the required side setbacks and seeks relief from that dimensional requirement. The relief sought is a**

A. Variance
B. Rezoning
C. Nonconforming use
D. Floating zone

**72. A zoning ordinance requires a 30 m planted strip between a heavy industrial zone and an adjacent residential zone. What is the main purpose of this strip?**

A. To provide sites for informal settlers
B. To increase the allowable floor area ratio
C. To reduce conflicts between incompatible uses
D. To reserve land for future road widening

**73. Under the Water Code of the Philippines (PD 1067), what easement width is reserved along the banks of rivers and streams in urban areas?**

A. 3 meters
B. 40 meters
C. 10 meters
D. 20 meters

**74. Which stage of environmental impact assessment determines whether a proposed project is covered by the EIS System and what type of document it must submit?**

A. Impact monitoring
B. Scoping
C. Baseline profiling
D. Screening

**75. Before the EIA study starts, the proponent, reviewers and affected communities agree on which key issues and impacts the study must address. This stage is**

A. Compliance monitoring
B. Screening
C. Scoping
D. Environmental auditing

**76. A proposed road alignment crosses a healthy mangrove stand. Following the mitigation hierarchy, which option should be considered first?**

A. Narrow the road through the mangroves
B. Pay compensation to affected fishers
C. Re-route the road around the mangroves
D. Replant mangroves at another site

**77. In disaster risk analysis, which measure primarily reduces exposure to flooding?**

A. Retrofitting houses with elevated floors
B. Dredging the river to improve flow
C. Banning new houses in mapped flood zones
D. Training barangay emergency responders

**78. Which of these is a climate change adaptation measure rather than a mitigation measure?**

A. Capturing methane at the city landfill
B. Replacing diesel buses with electric units
C. Raising a coastal road above projected sea level
D. Installing rooftop solar on public schools

**79. Thermal images show that a dense downtown is consistently 4 to 6 degrees Celsius warmer than surrounding farmland. This phenomenon is the**

A. Rain shadow effect
B. Sea breeze effect
C. Temperature inversion effect
D. Urban heat island effect

**80. A 20-ha grassland is converted into a paved subdivision without stormwater controls. What is the most likely hydrologic effect?**

A. Higher peak runoff that arrives sooner
B. Greater groundwater recharge on site
C. Lower peak runoff that arrives later
D. Longer time of concentration on site

**81. Using the rational method Q = CiA/360 (Q in m3/s, i in mm/h, A in ha), what is the peak runoff from a 12-ha catchment with C = 0.8 and rainfall intensity of 90 mm/h?**

A. 2.4 m3/s
B. 0.24 m3/s
C. 3.0 m3/s
D. 8.6 m3/s

**82. Which measure expresses the area of biologically productive land and water needed to supply a population's consumption and absorb its wastes?**

A. Environmental Kuznets curve
B. Ecological footprint
C. Carrying capacity
D. Biocapacity

**83. A province plans the uplands, lowland farms, rivers and coastal waters as one connected system so that upstream actions are managed for downstream effects. This is the**

A. Growth pole approach
B. Enclave approach
C. Sectoral approach
D. Ridge-to-reef approach

**84. A city concentrates compact, mixed-use, walkable development within about 400 to 800 m of new rail stations. This strategy is known as**

A. Edge city development
B. Strip commercial development
C. Leapfrog development
D. Transit-oriented development

**85. Low-density, single-use, car-dependent subdivisions are built far out at the urban fringe, skipping over vacant land closer to town. This pattern is**

A. Infill development
B. Urban renewal
C. Urban sprawl
D. Compact growth

**86. An abandoned factory site with suspected soil contamination is being considered for mixed-use redevelopment after cleanup. Such a site is called a**

A. Greyfield
B. Brownfield
C. Greenfield
D. Blue zone

**87. In the solid waste management hierarchy, which option has the highest priority?**

A. Composting of biodegradables
B. Waste avoidance and source reduction
C. Disposal in a sanitary landfill
D. Recycling of recovered materials

**88. Under the Ecological Solid Waste Management Act (RA 9003), which facility must be established in every barangay or cluster of barangays?**

A. Materials recovery facility
B. Sanitary landfill cell
C. Waste-to-energy incinerator
D. Leachate treatment plant

**89. Within a protected area, the zone where settlement, traditional uses and sustainable livelihood activities may be allowed under the management plan is the**

A. Strict protection zone
B. Wilderness reserve zone
C. Core habitat zone
D. Multiple-use zone

**90. Older housing vacated by higher-income households moves down to lower-income households as the original owners relocate to newer homes. This process is called**

A. Infilling
B. Gentrification
C. Filtering
D. Blockbusting

## Planning Laws, Administration and Professional Practice

**91. Which law regulates the practice of environmental planning in the Philippines and created the Board of Environmental Planning?**

A. RA 7160
B. RA 7279
C. RA 9729
D. RA 10587

**92. Under RA 10587, which body conducts the licensure examination for environmental planners together with the Professional Regulation Commission?**

A. Philippine Institute of Environmental Planners
B. National Economic and Development Authority
C. Department of Human Settlements
D. Board of Environmental Planning

**93. A consultant with no certificate of registration signs a municipal CLUP as 'Environmental Planner'. Under RA 10587, this act is**

A. Allowed for any government hire
B. Allowed with the mayor's consent
C. Allowed if a licensee supervises
D. Prohibited unauthorized practice

**94. Under RA 10587, which professional title abbreviation may be used by registered environmental planners?**

A. EnP
B. LEP
C. PEnv
D. REP

**95. Under Section 20 of RA 7160, a municipality may ordinarily reclassify up to what share of its agricultural land existing when the Code took effect?**

A. 20%
B. 10%
C. 5%
D. 15%

**96. A highly urbanized city had 2,400 ha of agricultural land when RA 7160 took effect. Under Section 20, what is the maximum area it may ordinarily reclassify?**

A. 240 ha
B. 480 ha
C. 120 ha
D. 360 ha

**97. Which body enacts a municipality's zoning ordinance?**

A. Provincial Land Use Committee
B. Sangguniang Bayan
C. Municipal Planning Office
D. Municipal Development Council

**98. Under RA 7160, nongovernmental organizations must make up at least what share of the members of a fully organized local development council?**

A. One-fourth
B. One-fifth
C. One-third
D. One-half

**99. Under RA 7160, who heads the city development council?**

A. City council majority leader
B. City vice mayor
C. City mayor
D. City planning coordinator

**100. Under RA 7160, the position of planning and development coordinator is**

A. Optional for all municipalities
B. Mandatory for provinces, cities and towns
C. Mandatory only for highly urbanized cities
D. Mandatory only for provincial governments

**101. Which body reviews the comprehensive land use plans and zoning ordinances of component cities and municipalities?**

A. Sangguniang Panlalawigan
B. Regional Trial Court
C. Sangguniang Barangay
D. Commission on Audit

**102. Under RA 7160, the local development council is primarily tasked to formulate which plan for approval by the sanggunian?**

A. Local solid waste management plan
B. Regional physical framework plan
C. Local climate change action plan
D. Comprehensive multi-sectoral development plan

**103. Which document lists prioritized programs and projects drawn from the comprehensive development plan for inclusion in the LGU's yearly budget?**

A. Comprehensive land use plan
B. Local shelter plan
C. Annual investment program
D. Zoning ordinance

**104. A municipality's CLUP should be consistent with which immediately higher-level physical plan?**

A. National physical framework plan
B. City public investment program
C. Provincial development and physical framework plan
D. Barangay development plan

**105. Which 1978 decree established the Philippine Environmental Impact Statement System?**

A. PD 1067
B. PD 705
C. PD 1586
D. PD 1151

**106. Under PD 1586, what must the proponent of an environmentally critical project secure before it may proceed?**

A. Locational clearance
B. Wastewater discharge permit
C. Certificate of non-coverage
D. Environmental compliance certificate

**107. PD 1586 brings projects into EIS System coverage under which two categories?**

A. Critical projects and projects in critical areas
B. Public projects and private projects
C. New projects and expansion projects
D. Large projects and urban projects

**108. Under RA 7279, at least how many days before the date of eviction or demolition must notice be served on the affected persons?**

A. 7 days
B. 60 days
C. 30 days
D. 15 days

**109. Under RA 7279, which practice complies with the requirements for carrying out evictions and demolitions?**

A. Night demolition to reduce resistance
B. Proceeding without local officials present
C. Weekday demolition in office hours, good weather
D. Saturday demolition to avoid work disruption

**110. Under RA 7279, which category of land comes last in the order of priority for acquisition for socialized housing?**

A. Unregistered or abandoned idle lands
B. Privately owned lands
C. Lands owned by the government
D. Alienable lands of the public domain

**111. Under RA 7279, expropriation as a mode of acquiring land for socialized housing may be used**

A. Only when other modes have been exhausted
B. As the first mode before negotiation
C. Never, since UDHA prohibits it
D. Only for government-owned lands

**112. An organized association of informal settlers obtains financing to buy, as a group, the private land it occupies, repaying through amortization. Under RA 7279, this mode is**

A. Land banking
B. Community mortgage
C. Expropriation
D. Land swapping

**113. Under RA 9729, who chairs the Climate Change Commission?**

A. The NEDA Director-General
B. The President
C. The DENR Secretary
D. The Senate President

**114. Under RA 9729, which plan are local government units tasked to prepare to address climate change in their jurisdictions?**

A. Executive-legislative agenda
B. Local climate change action plan
C. Local shelter plan
D. Local tourism development plan

**115. Under RA 9729, which document serves as the national framework for climate change planning?**

A. National Urban Development and Housing Framework
B. National Framework Strategy on Climate Change
C. Philippine Development Plan
D. National Physical Framework Plan

**116. A city planner owns land inside an area being studied for rezoning from agricultural to commercial use. What is the most appropriate ethical action?**

A. Sell the land after the plan is approved
B. Disclose the interest and withdraw from the study
C. Continue quietly since the gain is uncertain
D. Ask a relative to take over the analysis

**117. A private client asks a consulting planner to remove flood hazard findings from a site study before it is submitted to the city. The planner should**

A. Refuse and present the findings accurately
B. Soften them to avoid alarming buyers
C. Move them to an unpublished annex
D. Remove them if the client pays extra

**118. A city regulates the uses allowed on private land through zoning without paying the owners compensation. This regulation is an exercise of**

A. Eminent domain
B. Power of taxation
C. Proprietary power
D. Police power

**119. A municipality acquires a private lot for a road right-of-way against the owner's wishes after paying just compensation. This is an exercise of**

A. Police power
B. Power of taxation
C. Eminent domain
D. Reclassification power

**120. While a developer's subdivision application is under review in her office, a planning officer is offered an expensive gift by the developer. She should**

A. Accept it after the permit is issued
B. Accept it if it is declared later
C. Decline the gift and keep the review impartial
D. Accept it and pass the file to a colleague

# Answer key

Environmental Planning

**1. D. Disjointed incrementalism**

Lindblom's incrementalism ('muddling through') favors limited, successive comparisons and bargaining over comprehensive analysis.

**2. A. Mixed scanning**

Etzioni's mixed scanning combines a broad overview of fundamental choices with detailed examination of selected areas.

**3. A. Advocacy planning**

Davidoff's advocacy planning has planners represent disadvantaged groups by preparing plural, competing plans.

**4. A. Communicative or collaborative planning**

Communicative planning treats planning as an interactive, dialogue-based process in which the planner mediates among stakeholders.

**5. A. Tokenism**

Informing, consultation and placation form Arnstein's middle 'tokenism' group: people are heard but lack power to ensure action.

**6. B. Citizen control**

Citizen control is the top rung, above delegated power and partnership, where residents govern a program entirely.

**7. D. Concentric zone model**

Burgess's concentric zone model arranges urban land uses in rings around the CBD, with a zone in transition immediately outside it.

**8. A. Sector model**

Hoyt's sector model holds that land uses grow outward in wedges along transport corridors.

**9. D. Multiple nuclei model**

Harris and Ullman's multiple nuclei model describes cities developing around several discrete centers rather than a single core.

**10. B. Threshold**

Threshold is the minimum demand needed to support a good; range is the maximum distance consumers will travel for it.

**11. D. Hexagons**

Circles leave gaps or overlaps; hexagons are the most circle-like shape that tiles a plane completely.

**12. D. Market gardening and dairying**

Perishable, high-value products with high transport costs, such as vegetables and milk, outbid other uses nearest the market.

**13. D. Near the limestone source**

For weight-losing materials, Weber predicts location near the raw material to minimize transport cost.

**14. B. Ebenezer Howard's Garden City**

Howard's Garden City combined town and country, limited size with a greenbelt, and community ownership of land.

**15. D. Neighborhood unit concept**

Clarence Perry's neighborhood unit centers on an elementary school and keeps through traffic on bounding arterials.

**16. B. The Radburn plan by Stein and Wright**

Radburn, New Jersey introduced superblocks with complete separation of pedestrian and vehicular circulation.

**17. B. Daniel Burnham**

Daniel Burnham, a leading figure of the City Beautiful movement, prepared plans for Manila and Baguio in 1905.

**18. B. Patrick Geddes**

Patrick Geddes promoted the regional survey before planning and introduced the word conurbation for merged urban areas.

**19. B. Edges**

Lynch defined edges as linear boundaries that break continuity, as opposed to paths along which people move.

**20. C. Jane Jacobs**

Jane Jacobs set out these four conditions for urban diversity in The Death and Life of Great American Cities.

**21. B. Ian McHarg**

McHarg's Design with Nature popularized overlay suitability analysis, a forerunner of GIS-based land evaluation.

**22. C. Ekistics**

Doxiadis named the systematic study of human settlements ekistics.

**23. D. Our Common Future**

The Brundtland Commission's Our Common Future (1987) gave the widely cited definition of sustainable development.

**24. B. Take-off**

Rostow's take-off is marked by rising investment, leading sectors and institutions that make growth self-sustaining.

**25. A. Growth pole theory**

Perroux's growth pole theory relies on propulsive industries in a center generating linkages and spread effects.

**26. C. Backwash effects**

In Myrdal's cumulative causation, backwash effects draw resources from the periphery to the growing core.

**27. D. Urban primacy**

Jefferson's primate city concept describes a largest city disproportionately bigger and more dominant than the next.

**28. D. Wicked problems**

Rittel and Webber (1973) described such social planning problems as wicked, in contrast to tame, solvable problems.

**29. A. Tragedy of the commons**

Hardin's tragedy of the commons describes overuse of a shared resource when individuals act in their own short-term interest.

**30. D. Le Corbusier's Radiant City**

Le Corbusier's Ville Radieuse placed tall towers in open green space to achieve high density with light and air.

**31. C. 114,000**

The constant increase is 12,000/10 = 1,200 per year, so 96,000 + 1,200 x 15 = 114,000.

**32. D. 2.01%**

r = (61,000/50,000)^(1/10) - 1 = 1.22^0.1 - 1 = 0.0201, or about 2.01% per year.

**33. B. 146,568**

P = 120,000 x e^(0.025 x 8) = 120,000 x e^0.2 = 146,568; 146,208 is the annually compounded result.

**34. C. 40 years**

Doubling time is approximately 70 / 1.75 = 40 years.

**35. A. 75 persons per hectare**

Net residential density uses residential land only: 18,000 / 240 ha = 75 persons/ha; 40 persons/ha is the gross density.

**36. C. 6 storeys**

Maximum GFA = 1,200 x 4.0 = 4,800 m2; footprint = 0.60 x 1,200 = 720 m2; 4,800/720 = 6.67, so 6 full storeys.

**37. C. 2.5**

FAR = total gross floor area / lot area = (8 x 500) / 1,600 = 4,000/1,600 = 2.5.

**38. A. 2.5**

LQ = (6,000/80,000) / (30,000/1,000,000) = 0.075 / 0.030 = 2.5.

**39. C. is less concentrated locally than in the region**

An LQ below 1 means the sector's share of local employment is smaller than its regional share, suggesting the town imports such goods.

**40. A. 4,000 jobs**

Multiplier = 50,000/12,500 = 4, so total change = 4 x 1,000 = 4,000 jobs (3,000 of them non-basic).

**41. A. Regional (competitive) shift**

The competitive shift is what remains after removing national growth and industry mix effects, capturing local advantage.

**42. B. 20 km**

Breaking point from B = 60 / (1 + sqrt(400,000/100,000)) = 60 / (1 + 2) = 20 km.

**43. D. 66.7**

Dependency ratio = (33,000 + 7,000) / 60,000 x 100 = 66.7 dependents per 100 working-age persons.

**44. B. 105.3**

Sex ratio = males per 100 females = 51,300 / 48,700 x 100 = 105.3.

**45. A. 22 per 1,000**

CBR = 2,640 / 120,000 x 1,000 = 22 births per 1,000 population.

**46. D. +1,300**

Natural increase is 1,800 - 600 = 1,200; net migration = (77,500 - 75,000) - 1,200 = +1,300.

**47. A. Stratified random sampling**

Stratified sampling splits the population into homogeneous strata and draws random samples from each.

**48. A. Cluster sampling**

Cluster sampling randomly selects whole groups and surveys all units within the chosen groups.

**49. D. Delphi technique**

The Delphi technique uses anonymous, iterative expert rounds with controlled feedback to build consensus.

**50. B. An opportunity**

It is an external factor favorable to the town, which SWOT classifies as an opportunity.

**51. D. PHP 1.37 million**

PV of benefits = 3 x 3.7908 = 11.37 million; NPV = 11.37 - 10 = 1.37 million.

**52. B. 1.20, economically acceptable**

BCR = 18/15 = 1.20; a ratio above 1 means discounted benefits exceed discounted costs.

**53. B. 8 weeks**

te = (a + 4m + b)/6 = (4 + 28 + 16)/6 = 8 weeks.

**54. A. 12 weeks**

Path A-C-E takes 10 weeks and path B-D-E takes 12 weeks; the longest (critical) path sets the duration at 12 weeks.

**55. C. a strong negative linear relationship**

An r near -1 indicates a strong inverse linear association; correlation alone does not establish causation.

**56. B. Chi-square test of independence**

Both variables are categorical, so a chi-square test of independence is used.

**57. A. Median**

Ordinal data have ranked but unequal intervals, so the median is the appropriate central measure.

**58. B. Weighted overlay analysis**

Weighted overlay multiplies reclassified layers by weights and sums them to produce a suitability surface.

**59. D. Buffer analysis**

Buffering creates a zone of specified distance around a feature, which can then be intersected with household locations.

**60. C. 0.90 million**

Rank-size rule: Pn = P1/n = 3.6 million / 4 = 0.90 million.

**61. C. Formulating the vision**

The vision guides situational analysis, goals and the land use plan, all of which precede the zoning ordinance and its hearing.

**62. C. Zoning ordinance**

The zoning ordinance is the main regulatory tool that implements the CLUP's land use plan.

**63. A. An overlay zone**

An overlay zone superimposes additional regulations on underlying base zones within a defined area.

**64. A. Floating zone**

A floating zone is defined in the ordinance text but 'lands' on the map only upon approval of a qualifying project.

**65. A. Spot zoning**

Spot zoning singles out a small parcel for a classification inconsistent with surrounding zones and the plan, and is generally regarded as improper.

**66. C. Incentive zoning**

Incentive or bonus zoning grants added development rights in return for public amenities.

**67. C. Transfer of development rights**

TDR separates development rights from a sending site and lets them be used on a receiving site.

**68. B. Inclusionary zoning**

Inclusionary zoning mandates or encourages affordable units within market-rate developments.

**69. B. Cluster development**

Cluster development concentrates units on part of the site to conserve open space while keeping gross density.

**70. D. Nonconforming use**

A use that was lawful before a new zoning regulation but does not comply with it is a nonconforming use, usually allowed to continue under limits.

**71. A. Variance**

A variance grants relief from dimensional standards where strict application causes hardship due to unique site conditions.

**72. C. To reduce conflicts between incompatible uses**

Buffer strips separate incompatible land uses and reduce noise, odor and other nuisances.

**73. A. 3 meters**

The Water Code sets 3 m in urban areas, 20 m in agricultural areas and 40 m in forest areas.

**74. D. Screening**

Screening decides coverage and the required document type before any detailed study begins.

**75. C. Scoping**

Scoping focuses the EIA on significant issues and impacts identified with stakeholders.

**76. C. Re-route the road around the mangroves**

The mitigation hierarchy places avoidance first, then minimization, restoration and finally offsets or compensation.

**77. C. Banning new houses in mapped flood zones**

Exposure is the presence of people and assets in hazard areas; keeping development out of flood zones reduces it directly.

**78. C. Raising a coastal road above projected sea level**

Adaptation reduces vulnerability to climate impacts; the other options reduce greenhouse gas emissions, which is mitigation.

**79. D. Urban heat island effect**

Paved surfaces, buildings and waste heat make urban areas warmer than rural surroundings, creating an urban heat island.

**80. A. Higher peak runoff that arrives sooner**

Impervious surfaces reduce infiltration and speed up flow, raising peak discharge and shortening time to peak.

**81. A. 2.4 m3/s**

Q = 0.8 x 90 x 12 / 360 = 864/360 = 2.4 m3/s.

**82. B. Ecological footprint**

The ecological footprint measures demand on nature; biocapacity measures the supply side.

**83. D. Ridge-to-reef approach**

Ridge-to-reef management integrates watersheds and coastal ecosystems as linked units.

**84. D. Transit-oriented development**

TOD focuses density and mixed uses within walking distance of transit to increase ridership and reduce car dependence.

**85. C. Urban sprawl**

Sprawl is dispersed, low-density, leapfrog development that raises infrastructure and travel costs.

**86. B. Brownfield**

A brownfield is previously developed land, often industrial, whose reuse is complicated by real or suspected contamination.

**87. B. Waste avoidance and source reduction**

The hierarchy ranks avoidance and reduction first, then reuse and recycling, with disposal as the last option.

**88. A. Materials recovery facility**

RA 9003 requires a materials recovery facility in every barangay or cluster of barangays.

**89. D. Multiple-use zone**

Protected areas are zoned into strict protection zones with minimal human use and multiple-use zones where regulated activities are allowed.

**90. C. Filtering**

Filtering describes housing units passing down the income ladder as they age; gentrification is the reverse movement.

**91. D. RA 10587**

RA 10587, the Environmental Planning Act of 2013, regulates the profession and the Board of Environmental Planning under the PRC.

**92. D. Board of Environmental Planning**

The Board of Environmental Planning, under the PRC, administers the licensure examination; the professional organization does not.

**93. D. Prohibited unauthorized practice**

RA 10587 prohibits practicing or using the title of environmental planner without valid registration.

**94. A. EnP**

Registered environmental planners use the title Environmental Planner, abbreviated EnP.

**95. C. 5%**

Section 20 allows 15% for highly urbanized and independent component cities, 10% for component cities and 5% for municipalities.

**96. D. 360 ha**

Highly urbanized cities may reclassify up to 15% of that agricultural land: 0.15 x 2,400 = 360 ha.

**97. B. Sangguniang Bayan**

Zoning ordinances are legislative acts, so they are enacted by the municipal sanggunian.

**98. A. One-fourth**

The Local Government Code requires NGO representatives to be at least one-fourth of a fully organized council.

**99. C. City mayor**

Local development councils are headed by the local chief executive.

**100. B. Mandatory for provinces, cities and towns**

The Local Government Code makes the planning and development coordinator mandatory for provincial, city and municipal governments.

**101. A. Sangguniang Panlalawigan**

The provincial board reviews land use plans and zoning ordinances of its component cities and municipalities.

**102. D. Comprehensive multi-sectoral development plan**

The Code tasks each local development council with formulating long-, medium- and short-term multi-sectoral development plans.

**103. C. Annual investment program**

The annual investment program links the CDP to the budget by listing priority projects for a given year.

**104. C. Provincial development and physical framework plan**

Plans cascade from national to regional to provincial frameworks; the provincial plan sits directly above the municipal CLUP.

**105. C. PD 1586**

PD 1586 created the EIS System; PD 1151 is the 1977 Philippine Environmental Policy, PD 1067 the Water Code and PD 705 the Forestry Code.

**106. D. Environmental compliance certificate**

PD 1586 bars environmentally critical projects from proceeding without an ECC.

**107. A. Critical projects and projects in critical areas**

PD 1586 covers environmentally critical projects and projects located in environmentally critical areas.

**108. C. 30 days**

UDHA requires notice at least thirty days before the eviction or demolition.

**109. C. Weekday demolition in office hours, good weather**

UDHA requires execution during regular office hours on Mondays to Fridays and in good weather, unless the affected families consent otherwise, with local officials present.

**110. B. Privately owned lands**

UDHA lists government lands first and privately owned lands last in its order of priority.

**111. A. Only when other modes have been exhausted**

UDHA treats expropriation as a last resort after other modes of acquisition have been exhausted.

**112. B. Community mortgage**

Community mortgage, one of UDHA's modes of land acquisition, lets organized communities purchase land collectively.

**113. B. The President**

The Climate Change Act provides that the President of the Philippines chairs the Commission.

**114. B. Local climate change action plan**

RA 9729 makes LGUs frontline agencies that formulate and implement local climate change action plans.

**115. B. National Framework Strategy on Climate Change**

The Act directs the Commission to formulate a Framework Strategy on Climate Change as the basis for climate programs.

**116. B. Disclose the interest and withdraw from the study**

A conflict of interest must be disclosed, and the planner should not take part in decisions that may benefit him or her.

**117. A. Refuse and present the findings accurately**

A planner's primary duty is to the public interest, which rules out suppressing or misrepresenting hazard information.

**118. D. Police power**

Zoning is a police power measure to protect public welfare and generally requires no compensation.

**119. C. Eminent domain**

Eminent domain is the taking of private property for public use upon payment of just compensation.

**120. C. Decline the gift and keep the review impartial**

Accepting gifts from parties with pending applications creates a conflict of interest and compromises impartiality.

## Topics to review

• Land-use planning and zoning

• Demographic, spatial and environmental analysis

• Climate risk and disaster risk reduction

• Plan implementation, governance and ethics

## Online question banks and study resources

Environmental Planning - Pass Harbor (Question bank)

Official PRC board information

Current PRC exam programs

Independent study material prepared by Board Exam Desk.