What is Site Analysis Methodology?

Worksheet

Site analysis methodology is a systematic sequence of data collection, natural- and built-context study, and synthesis that architects follow to understand a site's opportunities and constraints before starting design.

Questions

1. Which of these is a 'natural factor' in site analysis?

A) Zoning setback
B) Prevailing wind direction
C) Adjacent building height
D) Traffic noise

2. What is the final step of site analysis methodology?

A) Data collection
B) Synthesis into an opportunities-and-constraints diagram
C) Choosing paint colors
D) Filing for a building permit

3. A site with a busy road on one side is best suited there for

A) quiet bedrooms
B) the main entrance
C) a meditation garden
D) nothing at all

4. Why is sun path analysis part of site analysis?

A) It affects building orientation and daylighting
B) It determines the zoning code
C) It sets the construction budget
D) It has no design impact

5. A site analysis reveals strong winter winds from the north and a scenic view to the south. How should this shape the massing?

6. A downtown lot has a busy street on the west and a quiet courtyard building to the east. Where should the entrance and noise-sensitive rooms go?

7. Soil reports show poor drainage in the low northeast corner of a site. How does this affect the site plan?

8. Define: What is site analysis methodology?

9. Define: Name the five typical stages of site analysis.

10. Define: What does a site analysis diagram usually show?

Answer Key

1. B) Prevailing wind direction - Wind, sun path, topography and vegetation are natural factors; setbacks and traffic are built/human factors.

2. B) Synthesis into an opportunities-and-constraints diagram - Synthesis combines all findings into a single diagram that guides the design concept.

3. B) the main entrance - High-visibility, high-noise edges suit entrances and public program, not quiet spaces.

4. A) It affects building orientation and daylighting - Sun path informs orientation, window placement, and shading strategy.

5. Natural factor: cold north winds place service spaces (garage, storage) as a buffer on the north side Human factor: south view orient main living/glazed spaces to face south Synthesis: a north-buffered, south-open massing concept

6. Built context: west = traffic noise and street visibility good for entrance and retail Human factor: east = quiet place bedrooms/offices there Synthesis: entrance faces the street (west), quiet program faces the courtyard (east)

7. Natural factor: poor drainage, low point unsuitable for building footprint Synthesis: reserve the northeast corner for a retention pond or landscaped swale, place the building on higher, well-drained ground

8. The structured process of studying a site's natural, built, and human factors before designing on it.

9. Data collection, natural factors, built context, human factors, synthesis.

10. Sun path, wind direction, views, noise, circulation, and topography, combined into an opportunities-and-constraints map.