

UNIVERSITY of NOTRE DAME
School of Architecture

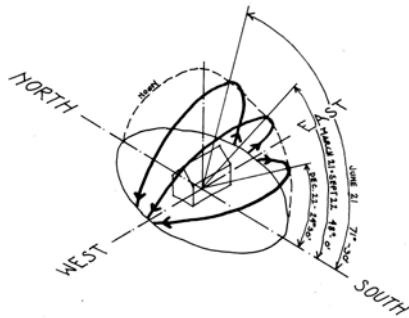
BUILDING TECHNOLOGY I / ARCH 20411 & ARCH 60411

September 6, 2012

QUIZ #2

1. The diagram below describes the following (choose one):

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- a. The ideal orientation for a structure in the northern hemisphere
 - b. A building oriented just east of south, with its long axis running east-west
 - c. A building oriented to take advantage of solar radiation in the winter time
 - d. All of the above
 - e. None of the above
2. Which type of regulatory code governs land usage? _____ (Zoning or Building)
3. Which of the following is NOT a way that climate influences the design of a building:
- a. Orientation
 - b. Program
 - c. Fenestration (Openings)
 - d. Massing (Form)
 - e. Internal Organization
4. True or False: The organization of a building translates into the massing of the building.
5. In a hot and arid climate – for example - protection from the sun may be an objective, in which case you will want to minimize _____ exposure.
- a. Northern
 - b. Western
 - c. Southern
 - d. Eastern

6. True or False: The introduction of shade trees may help you to achieve this objective (see # 5).
7. Consideration of desirable (and undesirable) views and vistas is *least* likely to influence which of the following:
 - a. The character, size, and location of a building's fenestration
 - b. The orientation and massing of a building
 - c. The introduction of plantings and landscaping around the building and site
 - d. The types of overhangs and shading devices employed
8. True or False: Shear strength is tested in tension and estimates the moisture content present in a soil sample.
9. Which soil type possesses high safe bearing capacity AND good drainage characteristics?
 - a. Bedrock
 - b. Stiff Clay
 - c. Gravel/ Sand
 - d. Topsoil
10. Which of the following characteristics describe a proposed building site (200'-0" long by 200'-0" wide) with a ground slope of 12 percent:
 - e. A gentle gradient
 - f. A potentially unusable site
 - g. A site where ground slope significantly restricts activity
 - h. A site with a total vertical rise of 24'-0"
 - i. All of the above
 - j. B and C
 - k. A and D
 - l. All but A

BONUS (1 point): "Composition is the _____ and the _____ of parts to create a _____".