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WAKNAGHAT

TEST – 3, 14-05-2019

M.tech 2nd Semester Construction Management

Course Code: 10M11CE215

Max. Marks: 35

Course Name: Sustainable Design and Construction

Max. Time: 2hr

Course Credits: 03

Note: All questions are compulsory. Marks are indicated against the questions. Carrying of mobile phone is strictly prohibited and will be treated as case of unfair means.

Q.1 What do you understand by SIP and ICF, explain with detailed diagram. [4]

Q.2 Explain in detail LEED rating system for Green Building. [4]

Q.3 Explain in detail working of earth sheltered houses. Discuss various types of earth shelter construction typologies. [4]

Q.4 Write a short note on following:

- (a) Caulking
- (b) Earth berming
- (c) Energy efficient window frames
- (d) Insulation via fiberglass
- (e) Recycling of gypsum or drywall
- (f) Solar Wall
- (g) Green framing systems

[1*7 = 7]

Q.5 With growing volume of buildings construction and demolition waste is posing an eminent threat to society. Explain in brief what kinds of wastes are generated on-site and what are best practices to deal with them? [4]

Q.6 How is indoor air quality affecting public health, discuss in brief problem associated with indoor air pollution. Also discuss solution to indoor improve air quality index. [4]

Q.7 What do you understand by greywater and blackwater systems. Based on case study of Chorrillos Peru, Lima discuss the solution for sustainable sanitation. [4]

Q.8 Discuss the environmental impact of the choice of energy supply (both conventional and renewable sources) for space and water heating in buildings. [4]