Assignment 8

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-10-02, 23:59 IST.

1) Which of the following method is advantageous for selection of building parameters at the design stage:
- Forward Analysis
- Backward analysis
- Both
- None of the above

No, the answer is incorrect. Score: 0
Accepted Answers: Forward Analysis

2) Which of the following optimization methods is best suited for optimization of qualitative and discrete parameters in building design optimization process?
- Single function optimization
- Gradient methods
- Genetic algorithm
- Direct search methods

No, the answer is incorrect. Score: 0
Accepted Answers: Genetic algorithm

3) Which of the following is not an operator in genetic algorithm:
- Selection
- Derivative
- Mutation
- Crossover

No, the answer is incorrect. Score: 0
Accepted Answers: Derivative

4) Temperature of calm air, at 50 percent relative humidity, which imparts the same thermal sensation as the given environment is known as:
- Dry bulb temperature
- Wet bulb temperature
- Tropical summer index
- Thermal load

No, the answer is incorrect. Score: 0
Accepted Answers: Tropical summer index

5) Consider 8 orientations, 16 wall constructions, 16 roof construction and 4 shapes, forming the solution domain for optimal envelope design using GA. What is the size of the chromosome in terms of binary bits?
- 11
- 12
- 13
- 14

No, the answer is incorrect. Score: 0
Accepted Answers: 13

6) Suppose you are considering U-value of walls, shape and orientations as the only decision variables and you have 16 options of U-values, 8 options of shape and orientation each. You are using GA for energy optimization; which of the following represents the chromosome string of a parent having 3rd U-value, 1st shape, and 2nd orientation.
- 00110000001
- 00110010010
- 00110010101
- 00110100000

No, the answer is incorrect. Score: 0
Accepted Answers: 00110000001