Quizzes for lecture 14

- To use genetic algorithm we usually encode a solution or individual into a binary string. This string is called genotype of the solution. To evaluate the goodness of the solution, we should decode the genotype to_____. Only genotype evolves during evolution.

- The goodness of a solution is called the _____. We need a method to evaluate the_____of a given solution. This method may not be given in a closed form formula.

- There are mainly three genetic operations in GA, namely, selection, crossover, and _____ . Together they produce new candidate solutions for further evolution. _____ is important for preserving the diversity of the population.

- In PSO, each candidate solution is called a_____. We need to keep the current position and velocity of a _____ in the search process.

- In PSO, each particle learns by itself. There are main two factors for learning. One is the personal factor, and another is _____ factor. The latter is important for “information sharing”.