



## EN.605.647.83.SP21 Neural Networks

Course Modules ...

Lectures and Quizzes

Review Test Submission: Quiz

6.1

## Review Test Submission: Quiz 6.1

User	BRIAN THOMAS LOUGHRAN
Course	EN.605.647.81.SP21 Neural Networks
Test	Quiz 6.1
Started	3/3/21 7:09 PM
Submitted	3/3/21 7:12 PM
Due Date	3/9/21 11:59 PM
Status	Completed
Attempt Score	6 out of 11 points
Time Elapsed	2 minutes
Instructions	Please complete this quiz after viewing the Module 6.1 Recorded Lecture.
Results Displayed	Submitted Answers, Feedback, Incorrectly Answered Questions

## Question 1

2 out of 2 points



The probabilities in an ensemble must sum to at least the value of  $e^{-E(i)}$  where the index  $i$  corresponds to an element of that ensemble with the greatest probability of occurring.

Selected Answer: False

## Question 2

0 out of 2 points



The transition probability used in the simulation of a thermodynamic system is based on solving a non-linear math program that maximizes the probability of events in an ensemble of occurring.

Selected Answer: True

## Question 3

2 out of 2 points



The form of the transition probabilities in simulated annealing need to take into account just the non-linear math program and the detailed balance equations for each state  $i$ .

Selected Answer: False

## Question 4

0 out of 3 points



In a minimization problem, simulated annealing will move from state  $i$  to state  $j$  where  $f_i = 2$  and  $f_j = 2$  at temperature 10 with probability

Selected Answer:

$$e^{-(2-10)}$$

**Question 5**

2 out of 2 points



Simulated Annealing convergences in probability to the globally optimal solution when certain cooling schedules are used.

Selected Answer: True

Wednesday, March 3, 2021 7:12:34 PM EST

← OK