Week 11 Quiz

Due Apr 26 at 11:59pm **Points** 12 **Questions** 3 **Time Limit** 15 Minutes
Allowed Attempts 2

Instructions

instructions.png Instructions

This quiz consists of three questions. To be successful with the module quizzes, it's important to read the assigned chapters and lecture slides. Keep the following in mind:

- **Attempts:** You will have two attempts for this quiz with your highest score being recorded in the grade book.
- **Timing:** You will need to complete each of your attempts in one sitting, and you are allotted 15 minutes to complete each attempt.
- **Answers:** You may review your answer choices and compare them to the correct answers after your final attempt.

To start, click the "**Take the Quiz**" button. When finished, click the "**Submit Quiz**" button.

Technical Support Technical Support

Need help using Canvas Quizzes? If so, please review the following guide: **Canvas Student Guide - Quizzes (https://community.canvaslms.com/docs/DOC-10701#jive_content_id_Quizzes)**

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	less than 1 minute	12 out of 12

Score for this attempt: **12** out of 12
Submitted Apr 26 at 10:38am
This attempt took less than 1 minute.

Question 1

4 / 4 pts

Which of the following is true regarding crossover and mutation in genetic algorithms?

Correct!

- (●) Crossover rate is usually high; mutation rate is usually low.
- ( ) Crossover rate is usually low; mutation rate is usually high.
- ( ) Both crossover rate and mutation rate are usually high.
- ( ) Both crossover rate and mutation rate are usually low.

Question 2

4 / 4 pts

Which of the following is true regarding crossover and mutation operations in genetic algorithms?

Correct!

- (●) A genetic algorithm may converge if it has mutation operations but no crossover operations.
- ( ) A genetic algorithm will always converge no matter which operation it has.
- ( ) A genetic algorithm will always converge if it has crossover operations but no mutation operations.

A genetic algorithm must have both crossover and mutation operations in order to converge.

Question 3

4 / 4 pts

What offspring will be generated considering the following parents and mask in uniform crossover?

Mask: 11001110

Parent #1 : 10100011

Parent #2 : 00110100

Correct!

- (selected) 10110010 and 00100101
- 10000010 and 00000100
- None of above
- 10100101 and 10111010

Quiz Score: **12** out of 12