

Instructor: Dr. David Malan | Date: 2024-12-15

Final Examination - Computer Science Fundamentals

Duration: 3 hours | Total Points: 100

A comprehensive examination covering all major topics from the course.

INSTRUCTIONS:

- Read each question carefully and completely before answering
- For multiple choice questions, select the best answer
- Write clearly and legibly for all written responses
- Show all work for calculation problems where applicable
- Review your answers before submitting
- Ask the instructor if you have any questions

Additional Notes:

This is a comprehensive test of the enhanced branding system.

Student Full Name: _____

Student ID/Number: _____

Date: _____

Signature: _____

Question 1. (5 points)

What is the primary purpose of an algorithm?

- A. To solve problems systematically
- B. To write code faster
- C. To debug programs
- D. To optimize memory usage

Question 2. (3 points)

Python is a compiled programming language.

- A. True
- B. False

Question 3. (10 points)

Explain the difference between a list and a tuple in Python.

Answer:

Question 4. (25 points)

Discuss the importance of data structures in computer science and provide examples of when you would use different types.

Answer: (Use the space below for your complete response)

[illegible]

