

## Assignment A7: Multiple Choice Assessment

**Course:** Introduction to Computer Science **Assignment Type:** Multiple Choice Examination **Due Date:** March 12, 2026 **Total Points:** 100 **Time Limit:** 60 minutes

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### Instructions

- This assessment contains 10 multiple choice questions
  - Each question is worth 10 points
  - Select the BEST answer from the five options provided (A, B, C, D, E)
  - Only ONE answer per question will be accepted
  - No partial credit will be awarded
  - You may use a calculator for computational questions
  - Review all answers before submitting
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### Questions

#### Question 1 (10 points)

What is the time complexity of binary search on a sorted array of  $n$  elements?

A)  $O(n)$  B)  $O(\log n)$  C)  $O(n \log n)$  D)  $O(n^2)$  E)  $O(1)$

Your Answer: \_\_\_\_\_

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#### Question 2 (10 points)

Which of the following is NOT a principle of Object-Oriented Programming?

A) Encapsulation B) Inheritance C) Polymorphism D) Compilation E) Abstraction

Your Answer: \_\_\_\_\_

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#### Question 3 (10 points)

In a relational database, what does the term "PRIMARY KEY" refer to?

A) A key used to encrypt database contents B) The first column in any database table C) A unique identifier for each record in a table D) A foreign key that references another table E) The most frequently accessed column in a table

Your Answer: \_\_\_\_\_

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**Question 4 (10 points)**

Which data structure follows the Last-In-First-Out (LIFO) principle?

**A)** Queue **B)** Array **C)** Stack **D)** Linked List **E)** Hash Table

**Your Answer:** \_\_\_\_\_

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**Question 5 (10 points)**

What is the result of the following Boolean expression: (True AND False) OR (True AND True)?

**A)** True **B)** False **C)** Null **D)** Undefined **E)** Error

**Your Answer:** \_\_\_\_\_

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**Question 6 (10 points)**

In software development, what does the acronym “API” stand for?

**A)** Advanced Programming Interface **B)** Application Programming Interface  
**C)** Automated Process Integration **D)** Applied Program Implementation **E)** Application Process Identifier

**Your Answer:** \_\_\_\_\_

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**Question 7 (10 points)**

Which sorting algorithm has the best average-case time complexity?

**A)** Bubble Sort -  $O(n^2)$  **B)** Selection Sort -  $O(n^2)$  **C)** Insertion Sort -  $O(n^2)$  **D)** Merge Sort -  $O(n \log n)$  **E)** Quick Sort (worst case) -  $O(n^2)$

**Your Answer:** \_\_\_\_\_

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**Question 8 (10 points)**

In the context of computer networks, what does HTTP stand for?

**A)** HyperText Transfer Protocol **B)** High Transfer Text Protocol **C)** Hyperlink Text Transport Process **D)** Home Tool Transfer Protocol **E)** Host Transmission Text Protocol

**Your Answer:** \_\_\_\_\_

\_\_\_\_\_

**Question 9 (10 points)**

Which of the following is an example of a non-volatile storage device?

**A)** RAM (Random Access Memory) **B)** CPU Cache **C)** Registers **D)** Solid State Drive (SSD) **E)** Virtual Memory

**Your Answer:** \_\_\_\_\_

\_\_\_\_\_

**Question 10 (10 points)**

What is the output of the following pseudocode?

```
x = 5
y = 10
if x > y:
    print("A")
elif x < y:
    print("B")
else:
    print("C")
```

**A)** A **B)** B **C)** C **D)** AB **E)** No output

**Your Answer:** \_\_\_\_\_

\_\_\_\_\_

**Answer Sheet**

For your convenience, fill in your answers below:

Question	Your Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

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## Submission Guidelines

- Submit your answers via the course portal
  - Clearly mark your selected answer for each question
  - Ensure all questions are answered before submitting
  - Late submissions will not be accepted
  - Once submitted, answers cannot be changed
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## Grading

- Each correct answer: 10 points
- Each incorrect answer: 0 points
- Unanswered questions: 0 points
- Total possible score: 100 points

**Grading Scale:** - A: 90-100 points - B: 80-89 points - C: 70-79 points - D: 60-69 points - F: Below 60 points

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## Academic Integrity

This is a closed-book examination. You may not use notes, textbooks, or collaborate with other students. Any form of cheating will result in automatic failure and disciplinary action.

**Good luck!**