

# PRACTICE EXAM

**Difficulty: MEDIUM**

**Questions: 10**

# \*\*Midterm Exam\*\*

## Multiple Choice Questions (4 points each)

\*Instructions: Choose the best answer for each question.\*

**Question 1:** What percentage of your final mark does the lab project account for?

- A) 20%
- B) 10%
- C) 8%
- D) 2%

**Question 2:** When must the project report be submitted?

- A) During the demonstration week
- B) One week after the demonstration
- C) On or before the end day of the semester
- D) After the source code is submitted

**Question 3:** What specific microprocessor board is used in the labs?

- A) Intel Pentium-based
- B) Motorola HCS12-based
- C) AMD Ryzen-based
- D) ARM Cortex-based

**Question 4:** In the lab project evaluation, what percentage is allocated to code quality?

- A) 1.0%
- B) 2.0%
- C) 3.5%
- D) 8%

## Short Answer Questions (6 points each)

\*Instructions: Answer each question in 2-3 complete sentences.\*

**Question 5:** Briefly describe what the robot is expected to do after learning the maze.

**Question 6:** What two components are evaluated in the project report, and what percentage of the final grade does each comprise?

**Question 7:** How are labs graded and what happens if the answers to questions are inadequate?

## **Problem-Solving Questions (10 points each)**

\*Instructions: Answer each question with sufficient detail.\*

**Question 8:** The course requires students to achieve a minimum of 50% in both the lab and theory components to pass. Explain how the lab component is weighted to the final grade, including both the individual labs and the group lab project.

**Question 9:** Outline the key components that should be included in the project report, as per the provided text. Explain the purpose of each component.

**Question 10:** Imagine you are a student who has identified a bug in your maze-solving robot project just before the demonstration. Describe the steps you would take to address this situation, both in terms of the immediate demonstration and in terms of the project report.