



**American International University- Bangladesh (AIUB)**  
**Faculty of Engineering**

**Course Name:** Microprocessor and Embedded Systems  
**Semester:** Fall 2022-23  
**Total Marks:** 20  
**Faculty Name:** Md. Ali Noor

**Course Code:** EEE 4103  
**Term:** Mid  
**Submission Date:** 30-10-2022  
**Assignment:** 02

**Course Outcome Mapping with Questions**

Item	COs	POIs	K	P	A	Marks	Obtained Marks
Q1	CO3	P.c.1.C4	K5	P1, P2, P7		5	
Q2	CO3	P.c.1.C4	K5	P1, P2, P7		5	
Q3	CO3	P.c.1.C4	K5	P1, P2, P7		5	
Q4	CO3	P.c.1.C4	K5	P1, P2, P7		5	
Total:						20	

**Student Information:**

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<b>Section:</b> K	<b>Department:</b> CSE

**Marking Rubrics (to be filled by Faculty):**

Problem #	Excellent [5]	Proficient [4]	Good [3]	Acceptable [2]	Unacceptable [1]	No Response [0]	Secured Marks
	Detailed unique response explaining the concept properly and the answer is correct with all works clearly shown.	Response with no apparent errors and the answer is correct, but the explanation is not adequate/unique.	The response shows an understanding of the problem, but the final answer may not be correct	The partial problem is solved; the response indicates part of the problem was not understood clearly.	Unable to clarify the understanding of the problem and method of the problem solving was not correct	No Response/(Copied/identical submissions will be graded as 0 for all parties concerned)	
1							
2							
3							
4							
Comments						Total marks (20)	

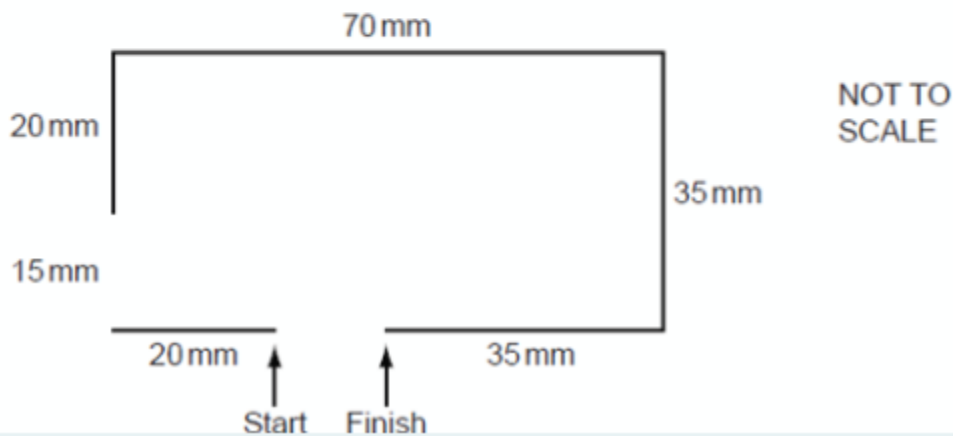
Place the right choice in the following table:

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>C</b>	<b>B</b>	<b>A</b>	<b>F</b>

## Problem Statement

A floor turtle can use the following instructions:

INSTRUCTION	MEANING
FORWARD $n$	Move $n$ mm forward
BACKWARD $n$	Move $n$ mm backward
LEFT $t$	Turn left $t$ degrees
RIGHT $t$	Turn right $t$ degrees
PENUP	Lift the pen
PENDOWN	Lower the pen
REPEAT $n$	Repeat the following instructions $n$ times
END REPEAT	Finish the REPEAT loop



### List Of Instructions:

- A. PENDOWN
- B. FORWARD 15
- C. PENUP
- D. REPEAT 2
- E. END REPEAT
- F. FORWARD 70

Complete the set of instructions to draw this shape by filling in the blank lines. You will need to use a **REPEAT** loop after the turtle has moved the 70 mm.

PEN DOWN

LEFT 90

FORWARD 20

RIGHT 90

*Instruction 5*

*Instruction 6*

*Instruction 7*

FORWARD 20

RIGHT 90

*Instruction 10*

*Instruction 11*

RIGHT 90

FORWARD 35

*Instruction 14*

Q1. **Select Instruction 5 from the list of given instructions**

➤ PENUP

Q2. **Select Instruction 6 from the list of given instructions**

➤ FORWARD 15

Q3. **Select Instruction 7 from the list of given instructions**

➤ PENDOWN

Q4. **Select Instruction 10 from the list of given instructions**

➤ FORWARD 70