

QP Code: D133014		Total Pages: 2	Name:
			Register No.
FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025			
(CUFYUGP)			
ELE1MN102 - ARDUINO PROGRAMMING			
2024 Admission onwards			
Maximum Time :2 Hours		Maximum Marks :70	
Section A			
All Question can be answered. Each Question carries 3 marks			
1	What is the Arduino programming language, and how does it differ from standard C/C++?	Ceiling : 24 Marks	
2	Explain the char data type in Arduino. How is it different from the int type?		
3	Explain the print() function in Arduino and its variations.		
4	Explain the syntax and usage of the if statement in Arduino with a simple example.		
5	Write a program to find the largest of two numbers.		
6	Explain an infinite while loop with an example.		
7	Discuss the different types of Arduino boards.		
8	What is the Arduino Serial Monitor, and how is it used in programming?		
9	Explain how an LED can be interfaced with an Arduino Uno to indicate different states.		
10	What are pull-up and pull-down resistors? Give its purpose.		
Section B			
All Question can be answered. Each Question carries 6 marks			
11	Describe the structure of an Arduino sketch.	Ceiling : 36 Marks	
12	Describe the arithmetic operators available in Arduino. Provide examples of at least three operators in a code snippet that performs basic arithmetic operations.		
13	Write a program to find the largest of 3 numbers.		
14	Discuss how break and continue alter the flow of control with suitable example.		

15	With a neat sketch explain the Arduino Uno board components.	
16	Write a program to display "Hello" repeatedly in the serial monitor with a 2 second delay.	
17	Explain how to read the state of a button switch in an Arduino program. Discuss the importance of debouncing and how it can be implemented.	
18	Explain the steps to interface an OLED display with an Arduino Uno board.	
Section C		
Answer any ONE. Each Question carries 10 marks		
19	Explain Pulse Width Modulation (PWM) and illustrate how it is utilized in Arduino programming with an example.	1x10=10 Marks
20	With neat circuit diagram explain how an LCD is interfaced with Arduino.	