University of Asia Pacific

Department of Computer Science & Engineering

Mid-Semester Examination Spring-2020

Program: B. Sc Engineering (3ʳᵈ Year/ 2ⁿᵈ Semester)

Course Title: Peripheral & Interfacing   Course No. CSE 315   Credit: 3.00

Time: 1.00 Hours.   Full Marks: 60

There are **Three** Questions. Answer all of them. All questions are of equal value/Figures in the right margin indicate marks.
Please note that there are two question at number 3, answer only one of them.
*In Arduino environment, sketch and code are synonymous.

1.   "***Peripheral*** *and* ***Interfacing****, refers to the same thing in Computer Science.*"

    a. Here what do we understand by the two afore-mentioned terms? Write some examples: [05]

    b. What do you think, Is the statement true/false? Explain your answer with detailed example.   [15]

2 a. What is the functionality of **analogWrite()**? Write an example sketch to show the functionality briefly.   [10]

    b. What is Function Prototyping in Arduino? Write different modules of **Serial.Print()** with proper explanation and example.   [10]

3. a. You will have to operate some variables of Arduino sketch bit by bit. In this situation, which type of operator will you use? Write a description upon that. (Describe all operators with example of that group.)   [10]

    b. What is Shield in Arduino? Describe the importance of L293D and Relay Module with appropriate examples.   [10]

<div align="center">Or,</div>

3. a. What does the term IoT means? Mention some of the applications of IoT in modern life with Example.   [10]

    b. Suppose, you want to design a solution for healthcare and want to use IoT for it. Which domain will be used in that case? Explain the groups of that domain.   [10]