Faculty of Science & Technology
Department of Computer Engineering

Data Acquisition System Regular CIE-2 Exam

Subject: BSCCS19403 : Data Acquisition System   **Date: 15/04/2021**

Instructions to the Candidates:
All questions are compulsory.
Figures to the right indicate full marks.
Use of logarithmic tables, electronic pocket non programmable calculator is allowed
Assume suitable data, if necessary.
Program Codes should have proper comments.

Q.no		Marks
1	Explain the working of three op-amp instrumentation amplifier along with its gain derivation. Also explain how it meets requirments of a good instrumentation amplifier.	10
2	Explain the working of 4x4 Keypad. How to interface this keypad with Arduino Uno. Write a code for this interface where the key (alpha-numeric) pressed on keyboard is displayed on a single-digit 7-segment display.	10
3	Explain the following functions 1. digitalRead() 2. digitalWrite() 3. pinMode()	5