AD-3284
Third Year B. Sc. (Sem. VI) Examination
March/April – 2015
Electronics Paper - VIII
(Microcontroller & Embedded Systems)

Time : 2 Hours] [Total Marks : 50
Instructions :
(1) Figures to the right indicate full marks.
(3) Assume data wherever necessary.
(4) Use suitable examples.

1 Write very short answers :
   8
   (1) If the internal memory of 8051 is to be used what should be the logical status of the 8051 EA pin.
   (2) What happens when upload switch is pressed in Arduino sketch.
   (3) What input parameters are given to pinMode function of Arduino?
   (4) What will happen when the program code
       "for(i = 0 ; i = 100; i++);
       " is executed in keil 8051 C program.

2 (A) Explain the meaning of interfacing. How is an LED interfaced with the 8051 microcontroller? 8
     (B) An LED is connected on the pin P1.3 of the 8051 port write a C program to blink the LED.

     OR

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[Contd...
2. (A) Explain the arithmetic and logic operators supported by Keil C. What data types are supported by 8051 C?
   (B) Write a program to toggle the Port I of 8051 microcontroller 100 times.

3. (A) What is a sketch? What is the use of setup() and loop() functions of Arduino sketch?
   (B) Write a program to blink the LED on Arduino board. Explain each line in the program.

   OR

3. (A) Discuss the programming of 8051 timers in Keil C using suitable examples.
   (B) What is a DAC? How is it interfaced with 8051?

4. Write Short Notes:
   (1) Comparison of C and assembly language
   (2) Interfacing a Relay
   (3) Arduino analog input function
   (4) Pin description of 8051