DRR-3284
Third Year B. Sc. (Sem. VI) Examination
March / April - 2016
Electronics : Paper - VIII
(Microcontroller and Embedded Systems)

Time : 2 Hours] [Total Marks : 50
Instruction :

(1) Fill up strictly the details of signs on your answer book.

Seat No. :

Name of the Examination :
Third Year B. Sc. (Sem. VI)
Name of the Subject :
Electronics : Paper - VIII
Subject Code No. : 3 2 8 4
Section No. (1, 2,.....) : Nil
Student's Signature

(2) Figures to the right indicate full marks of the question.
(3) Assume data wherever necessary.
(4) Use suitable examples.

1 Write very short answers
   (1) Give the full form of ADC & DAC
   (2) What is the use of digital ? Write function of Arduino.
   (3) How many timers does a standard 8051 have?
   (4) What is the use of ALE pin of 8051 ?

2 (A) What is Arduino framework? Discuss the Arduino IDE.     8
   (B) Write a program to blink the led on Arduino board such that it is 1 second on and 2 seconds off. Explain each statement of your program.

   OR

2 (A) What is the difference between assembly language and "C" language. What data types are supported by 8051 C?
   (B) Write a program to toggle bit DO of the Port 1 of 8051 microcontroller (P1.0) 50000 times.

   DRR-3284] [Contd...
3 (A) What data types are supported by 8051 C? Explain the arithmetic and logic operators supported by C. 9
(B) Write a program to toggle the Port 1 of 8051 microcontroller 10 times. 5

OR

3 (A) What is common anode and common cathode seven segment display device explain using proper diagrams? How are they interfaced with 8051 port? 9
(B) What is ADC how is it interfaced with 8051? 5

4 Write Short Notes:
(1) Serial port programming in Arduino
(2) Programming 8051 time 0
(3) Logical operations in 8051
(4) Interfacing a Relay.

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