



**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)

नीचे इशारेक निशानीवाणी विगतो उत्तरवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="THIRD YEAR B. SC. (SEM. VI)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="ELECTRONICS PAPER - VIII"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="2"/> <input type="text" value="8"/> <input type="text" value="4"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

- (2) 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. 6

**OR**

- 2 (A) Explain the arithmetic and logic operators supported by Keil C. What data types are supported by 8051 C? 9  
(B) Write a program to toggle the Port I of 8051 microcontroller 100 times. 5
- 3 (A) What is a sketch? What is the use of setup () and loop () functions of Arduino sketch? 9  
(B) Write a program to blink the LED on Arduino board. Explain each line in the program. 5
- OR**
- 3 (A) Discuss the programming of 8051 timers in Keil C using suitable examples. 9  
(B) What is a DAC? How is it interfaced with 8051? 5
- 4 Write Short Notes : 14
- (1) Comparison of C and assembly language
  - (2) Interfacing a Relay
  - (3) Arduino analog input function
  - (4) Pin description of 8051
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