



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)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
Third Year B. Sc. (Sem. VI)	<input type="text"/>
Name of the Subject :	<input type="text"/>
Electronics : Paper - VIII	<input type="text"/>
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 8
- (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 6
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 9
and "C" language. What data types are supported
by 8051 C?
- (B) Write a program to toggle bit DO of the Port 1 5
of 8051 microcontroller (P1.0) 50000 times.

- 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 : 14
- (1) Serial port programming in Arduino
 - (2) Programming 8051 timer 0
 - (3) Logical operations in 8051
 - (4) Interfacing a Relay.