



RAN-1218

T Y B Sc Electronics Semester VI Examination

March / April - 2019

Electronics Paper VIII: Microcontroller and Embedded System

सूचना : / Instructions

नीचे दृशविले निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी.
Fill up strictly the details of signs on your answer book

Name of the Examination:

T Y B Sc Electronics Semester VI

Name of the Subject :

Electronics Paper VIII: Microcontroller and Embedded System

Subject Code No.: 1 2 1 8

Seat No.:

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Student's Signature

Q. 1 Write Very Short Answers

1. Draw the internal diagram of common cathode 7 segment display device
2. What is the use of setup () function in Arduino?
3. What is baud rate?
4. Describe the general interfacing pins available on Arduino UNO board

Q.2 A Explain the methods of interfacing relay and opto isolator to the microcontroller pins

B Write a program to blink an led on the Arduino board

OR

Q.2 A Discuss the Arduino framework in terms of hardware and software. Explain how microcontroller programming is made easy by Arduino

B Write a program to read the analog voltage on pin A3 of Arduino and display the equivalent voltage on the computer screen

Q.3 A What are the advantages of C language over the assembly language? Explain how the bit variables are defined in C language giving suitable examples.

B Write a program to toggle the Port 3.1 of 8051 microcontroller using Keil C

OR

Q.3 A Discuss the following functions of Arduino

1. pin Mode ()
2. delay ()
3. digital Write ()
4. digital Read ()

B Write a program in Arduino to read the status of a switch connected to pin 8 using a pull up resistor. Toggle an LED every time when the switch is pressed

Q.4 Write Short Notes (ANY TWO)

1. Serial communication in Arduino
 2. Keil IDE for microcontroller 'C programming
 3. ADC and DAC
 4. Interfacing a Key using Arduino
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