

**Q1 ) Basically there are a difference in feature issues between Microprocessor and Microcontroller count them? (25 Marks)**

**Q2) In order to use any execution of an Interrupt, What are the steps must be taken before Interrupt execution? (25 Marks)**

**Q3 ) For the following registers define Five of them only ? (25 Marks)**

**1.TIMER REGISTER. 2.CONTROL REGISTER. 3.INSTRUCTION REGISTER.  
4.STACK POINTER 5.SERIAL DATA BUFFER. 6.DATA POINTER (DTPR).**

**Q4 ) In follow Arduino program steps find the errors and correct them. (25 Marks)**

<pre>1. if digitalWrite(buttonPin) == HIGH     Serial.write'H' else     Serial.write 'L' delay(1000);</pre>	<pre>2. do {     delay50    // wait for sensors to stabilize     x = readSensors(); // check the sensors } while x &lt; 100;</pre>
<pre>3. for x = 0; x &lt; 255; x ++ {     if x &gt; 40 &amp;&amp; x &lt; 120{    // create jump in values         continue     }     analogWrite(PWMPin, x)     delay(50) }</pre>	<pre>4. int checkSensor(){     if analogRead(0) &gt; 400{         return 1     }     else{         return 0     } }</pre>