



**AC-2951**  
**First Year B. Sc. (Sem. II) Examination**  
**April / May - 2015**  
**Electronics for Computer Science**  
**Logic Circuits : Paper - II**

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृशायेक निशानीवाणी विगतो उत्तरवही पर अवश्य कर्णवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <input type="text" value="First Year B. Sc. (Sem. II)"/></p> <p>Name of the Subject : <input type="text" value="Electronics for Comp. Sci. : Logic Circuits : Paper - II"/></p> <p>Subject Code No. : <input type="text" value="2"/> <input type="text" value="9"/> <input type="text" value="5"/> <input type="text" value="1"/> Section No. (1, 2,.....): <input type="text" value="Nil"/></p>	<p>Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 100%; text-align: center; margin-top: 10px;">Student's Signature</div>
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- (2) Question no. 1 is compulsory.  
(3) Symbols and terminology used here have their usual meanings.

<b>Q-1</b>	<b>Write short answers</b>	<b>[8]</b>
	<ol style="list-style-type: none"><li>1. What is RAM?</li><li>2. What is T-flip-flop?</li><li>3. What is Shift Register?</li><li>4. What is Asynchronous counter?</li></ol>	
<b>Q-2</b>	<ol style="list-style-type: none"><li>1. Draw &amp; discuss the Edge triggered J-K flip flop with suitable diagrams.</li><li>2. Draw &amp; discuss the R-S - flip flop with suitable diagrams.</li></ol>	<b>8</b> <b>6</b>
<b>OR</b>		
<b>Q-2</b>	<ol style="list-style-type: none"><li>1. Discuss the DRAM in detail.</li><li>2. Discuss the types of ROM &amp; EPROM in detail.</li></ol>	<b>8</b> <b>6</b>
<b>Q-3</b>	<ol style="list-style-type: none"><li>1. Draw &amp; discuss the Two Bit ripple up-down counter using negative triggered flip flop with suitable diagrams.</li><li>2. Draw &amp; discuss the: MOD-10 Asynchronous counter using T flip flops with suitable diagrams.</li></ol>	<b>8</b> <b>6</b>

**OR**

- Q-3 1 Draw & discuss the "Parallel In parallel Out Shift Register " with suitable diagrams. 8
- 2 Draw & discuss the: Synchronous 3 bit down counter with suitable diagrams. 6
- Q-4 Write short notes ( Any Two) [14]
- 1 Digital clock
  - 2 4 Bit parallel binary Adder
  - 3 Ring Counter
  - 4 Controlled Invertor
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