



**DPP-2951**  
**First Year B. Sc. (Sem. II) Examination**  
**March / April - 2016**  
**Electronics for Computer Science : Paper - II**  
**(Logic Circuits)**

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : First Year B. Sc. (Sem. II)</p> <p>Name of the Subject : Electronics for Computer Science : 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> <p style="text-align: center;">Student's Signature</p>
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- (2) All questions are compulsory.  
(3) Figures to the right indicate marks.

- |   |                                                                             |   |
|---|-----------------------------------------------------------------------------|---|
| 1 | Write short answers :                                                       | 8 |
|   | (1) What is RAM ?                                                           |   |
|   | (2) What is D-flip-flop ?                                                   |   |
|   | (3) What is Shift Register ?                                                |   |
|   | (4) What is Asynchronous counter ?                                          |   |
| 2 | (1) Draw and discuss the RS flip-flop with suitable diagrams.               | 8 |
|   | (2) Draw and discuss the Edge triggered D-flip-flop with suitable diagrams. | 6 |

**OR**

- |   |                                          |   |
|---|------------------------------------------|---|
| 2 | (1) Discuss the SRAM in detail.          | 8 |
|   | (2) Discuss the types of ROMs in detail. | 6 |

- 3** (1) Draw and discuss the “Two Bit ripple up counter using 8 negative triggered flip-flop” with suitable diagrams. **8**
- (2) Draw and discuss the MOD-6 Asynchronous counter using T flip-flops with suitable diagrams. **6**

**OR**

- 3** (1) Draw and discuss the “Serial In Serial Out Shift Register” with suitable diagrams. **8**
- (2) Explain the “Data Transmission” in Shift registers. **6**
- 4** Write short notes : (any two) **14**
- (1) Buffer Register **7**
- (2) Universal Shift Register **7**
- (3) Dynamic RAMs **7**
- (4) Cascading of Ripple Counter. **7**

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