



AC-2950

First Year B. Sc. (Sem. II) Examination

April / May - 2015

Electronics for Computer Science : Paper - I
(Electronics Switching Circuits)

Time : 2 Hours]

[Total Marks : 50

Instructions :

(1)

नीचे दृशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
First Year B. Sc. (Sem. II)

Name of the Subject :
Electro. for Comp. Sci. - I (Electronics Switching Circuits)

Subject Code No. : 2 9 5 0 Section No. (1, 2,.....): Nil

Seat No. :
[] [] [] [] [] []

Student's Signature

- (2) Question no. 1 is compulsory.
(3) Symbols and terminology used here their usual meanings.

Q-1	Write short answers	[08]
	1. Draw the RC circuit to response the Square wave.	
	2. What will be the value of the time constant RC if $R=680k\Omega$ and $C=0.01\mu F$.	
	3. What is IC -555? Why such name is given to this device?	
	4. Draw neat and clean circuit diagram of diode NOR Gate.	
Q-2	1. What is Differentiation? Draw & discuss the differentiation for Pulse wave forms.	10
	2. Draw the "Negative Series clipper" and explain it briefly.	04
	OR	
Q-2	1 Draw & discuss the Diode as Switch in detail..	10
	2 Draw the " Positive series clipper" and explain it briefly.	04
Q-3	1 Draw & discuss the Collector-coupled Monostable multivibrator.	10
	2 Draw the neat & clean circuit diagram for "Triggering Monostable multivibrator" & explain its working briefly.	04
	OR	

- Q-3**
- 1** Discuss the “ Practical Transistor Switch “ with suitable graph and circuit diagrams. **10**
 - 2** Draw the Time relationship between Base current and Collector current in a transistor switching circuit. Clearly indicate the “ delay time, rise time, turn-off time, and storage time “. **04**
- Q-4** Write short notes (Any Two) **[14]**
- 1** Transistor switching times
 - 2** Capacitor- coupled inverter.
 - 3** Diode NAND Gate
 - 4** N-MOS NAND gate
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