17/03/15
10.30 a.m to 12.00 noon
Total Marks 25

Q.1 Multiple Choice Questions: 03

1. The output of X-OR gate is high
   I.   When both the inputs are high
   II. When both the inputs are low
   III. When both the inputs are complementary
   IV. None of the above

2. In J K Flip Flop, J=K=1, then
   I.   Q=1
   II. Q=forbidden state
   III. Q=toggle
   IV. Last state

3. Delay time is more in case of
   I.   Serial Counter
   II. Parallel Counter
   III. Combinational Counter
   IV. None of the above
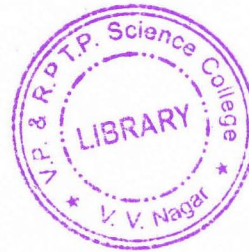
Q. 2 Answer any three questions in short. 04

1. Define Fan in and Fan out of Circuit.
2. What are advantages of D Flip Flop over RS Flip Flop?
3. What is the advantage and disadvantage of serial counter?

Q.3   Describe any three applications of X-OR gate.   06

OR

Q.3 Describe in detail working of TTL NAND gate with logic specifications.   06

Q.4   Describe in detail Edge triggered D Flip Flop.   06

OR

Q.4   Describe fully Schmitt Trigger circuit.   06

Q.5   Explain working of 8bit Asynchronous counter. Draw waveform diagram also.   06
                                    OR

Q.5   Explain working of Mod 6 parallel counter. Draw waveform diagram also.   06

*****************************BEST OF LUCK *************************