

V.P. & R.P.T.P. Science College
S. Y. B.Sc. Examination Semester – III
COMPUTER SCIENCE (US03ECSC01)
Digital Computer Electronics



Date: 06/10/2015

Time: 03:00 PM to 04:00 PM

Max. Marks: 25

Que. 1 MCQ

(3)

1. Invert gate has only _____ input and _____ output.

A. Two, One B. One, Two C. One, One D. None

2. A _____ is a memory element that stores a binary digit.

A. binary adder B. decoder C. multiplexer D. flip-flop

3. Ring counter producing words with 1 high bit, which shifts _____ position per clock pulse.

A. one B. two C. three D. none

Que. 2 Short Questions (Any two)

(4)

1. Write truth table for: $A'B+B'C$, $ABC+A'B'C'$.

2. Write a short note of half adder.

3. Draw logic circuit of controlled buffer register.

Que. 3 Explain AND, NOR, NAND, OR, NOT, XOR gate.

(6)

OR

Que. 3 Explain Associative law, distributive law and commutative law.

(6)

Que. 4 Explain 8x1 multiplexer in detail.

(6)

OR

Que. 4 Explain binary adder-subtractor in detail.

(6)

Que. 5 Explain ring counters in detail.

(6)

OR

Que. 5 Explain controlled buffer register

(6)

ALL THE BEST