

V.P. & R.P.T.P. SCIENCE COLLEGE
S.Y.B.Sc. (SEMESTER – III)
INTERNAL TEST: OCT-2017
US03ECSC01: Digital Computer Electronics

DATE: 07/10/2017

TIME: 03:00pm to 04:00pm

MARKS: 25

Q.1 Multiple Choice Question

[03]

1. Invert gate has only _____ input and _____ output.
A. Two, One B. One, Two C. One,One D. None
2. In k-map, octets eliminates _____ variable.
A. one B. two C. three D. four
3. A _____ is a memory element that stores a binary digit.
A. binary adder B. decoder C. multiplexer D. flip-flop



Q.2 Answer the following in short (Any two)

[04]

1. Explain Associative Law.
2. Define comparator in short.
3. Explain Half-Adder in short.

Q.3 Explain AND, NOR, NAND with diagram and Truth table.
OR

[06]

Q.3 Explain De'morgan first and second theorem.

[06]

Q.4 Define encoder. Explain 8x3 encoder in detail.

[06]

OR

Q.4 Define decoder. Explain 3x8 decoder in detail.

[06]

Q.5 Explain 4x1 multiplexer in detail.

[06]

OR

Q.5 Explain binary adder-subtractor (1's Complement adder-subtractor)

[06]