

V.P & R.P.T.P SCIENCE COLLEGE

Sem: 5th,
01/10/2013
Tuesday

Internal test
DIGITAL ELECTRONICS
US05CELE02

T.Y.B.Sc.
3:30 to 5:00 PM
Total Marks: 30

Q-1 Choose Correct Answer [6]

- (1) Register are made of _____
(A) Flip-flop (B) resister (C) diode (D) none of these
- (2) Loading of a register means _____ or Resetting flip-flop.
(A) Setting (B) Re-setting (C) Erasing (D) None of these..
- (3) Bidirectional register use _____ logic.
(A) AND-OR (B) OR-OR (C) AND-NOT (D) None of these
- (4) Universal shift register uses _____ logic.
(A) AND-OR (B) OR-NOT (C) AND-OR-NOT (D) None of these
- (5) Carry Generate function $CG =$ _____
(A) $A \cdot B$ (B) $A + B$ (C) A / B (D) None of these.
- (6) _____ gate is a basic comparator.
(A) X-NOR (B) X-OR (C) AND (D) None of these.

Q-2 Answer the Questions. (Any Three, each two marks) [6]

- (1) Draw the logic diagram of 4-bit parallel-in, Parallel-out simple shift register.
(2) Draw the logic diagram of 4-bit serial-in, Parallel-out shift register.
(3) Draw the diagram of UART as Interfacing device and explain in brief.
(4) Explain Johnson counter in brief.
(5) Draw the logic symbol 74LS83 & label it.
(6) Draw the Pin Diagram of 7485, 4-bit comparator and label it.

Q-3 List different types of Data Transmission in shift register and explain each of them drawing diagram. [6]

OR

Q-3 Give an account of Controlled buffer register. [6]

Q-4 Draw a neat diagram of universal shift register. [6]

OR

Q-4 Give an account of Bidirectional shift register. [6]

Q-5 Give an account of comparator. [6]

OR

Q-5 Draw the neat diagram of Look-Ahead carry adder. [6]



*****All the best*****