

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\*\*\*\*\*