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

## INTERANAL EXAM

## T.Y.B.Sc.(SEM-V) ELECTRONICS

| SUB:             | - Digital systems   | SUB CODE: U   | S05CELE02 |
|------------------|---|---|-----------|
| DATE:-03/10/2019 |   | TIME: 11:00 pm to 12:15 pm                          | MARKS-25  |
| Q-1              | Choose correct answer   |   | [05]      |
| 1.               | Registers are made of   | <u>_</u> .  | P. S.     |
|                  | (A) flip-flops  | (C) Resistor  | (2:       |
|                  | (B) capacitor   | (D) None of above                                   | 1/28/     |
| 2.               | In controlled buffer register is the control input.                                   |   | LIBR      |
|                  | (A) LOAD  | (C) serial input                                    | *         |
|                  | (B) CLR   | (D) None of above                                   | VN        |
| 3.               | In bi-directional register data bit is shifted from left to right and right to        |   |           |
|                  | (A) left  | (C) up  |           |
|                  | (B) right   | (D) None of above                                   |           |
| 4.               | An IC 74LS83 is abit parallel adder.  |   |           |
|                  | (A) four  | (C) one   |           |
|                  | (B) three   | (D) None of above                                   |           |
| 5.               | The Schmitt trigger has UTP and   |   |           |
|                  | (A) MTP   | (C) NO- PT  |           |
|                  | (B) LTP   | (D) None of above                                   |           |
| Q-2              | 2 List different types of Data transmission in registers and explain it with diagram. |   | [05]      |
|                  |   | OR  |           |
| Q-2              | Draw the circuit of four bit serial shift register and explain it in detail.          |   | [05]      |
| Q-3              | Draw the circuit of four bit b  | oidirectional shift register and explain it in brie | f. [05]   |
| Q-3              | Explain Tri-state switch in de  |   | [05]      |
| Q-4              | Give an account of compara  | rtor.   | [05]      |
| Q-4              | Draw a neat circuit of look ahead carry adder.  |   | [05]      |
| Q-5              | Explain CMOS to TTL interfacing   | ng in detail.                                       | [05]      |
| Q-5              | Draw the diagram of Schmitt trigger as a interface circuit and explain it.            |   | [05]      |

