

S.No. of Question Paper:

Unique Paper Code: 32227518

Name of the Paper: Embedded Systems

Name of the Course: B.Sc. (Hons.) Physics

Semester: V

Time: 3:00 Hrs.

Max. Marks: 75

Note:

1. Attempt any **FOUR** questions. All Questions carry equal marks.

1. What is the function of RD*, WR* and IO/M* pins of 8085? Using these signals, design a logic circuit to output memory and I/O read and write enable pins: IOR*, IOW*, MR* and MW*.
2. Explain the interrupt structure of 8085.
3. What is DMA? How is DMA supported on the 8085?
4. Draw the timing diagram of Output Write machine cycle for 8085.
5. Using a pin diagram, explain the features of the 8051 microcontroller.
6. Connect a Common-Anode seven-segment display (SSD) to a suitable port of 8051. Write an assembler program to implement a 4-bit binary counter and display the counter values on the SSD.