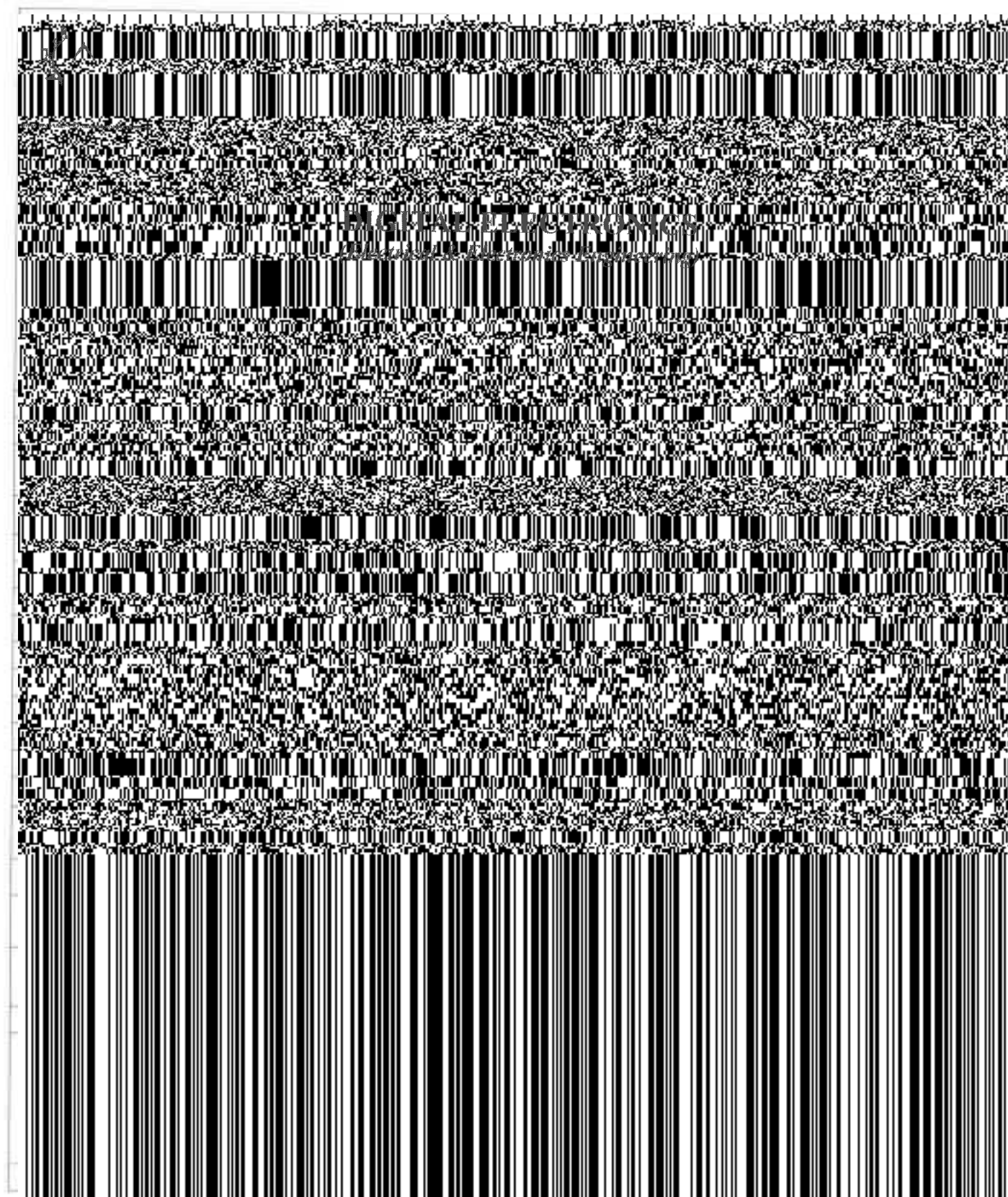




	b) What is memory decoding? Explain about the construction of 4 X 4 RAM ?	5M		
	OR			
7	Implement BCD to 7-segment decoder for cathode type using 4:16 decoder?	10M	CO3	L5
8	a) Design and draw the 3 bit up-down synchronous counter? b) Explain about Ring counter?	5M 5M	CO4	L3
	OR			
9	Explain the working of the following i) J-K flip-flop ii) S- R flip-flop iii) D flip-flop	10M	CO4	L3
10	a) Derive the ASM chart for binary multiplier b) What is a Hazard in an asynchronous sequential circuits? Define static hazard, Dynamic hazard and Essential hazard	5M 5M	CO5	L5
	OR			
11	Design a circuit to detect occurrence of "01" in a stream of the serial data. Assume that input is x output is y a. Draw state diagrams for both Mealy and Moore models. b. Implement the Mealy model using T flip-flop.	10M	CO5	L5