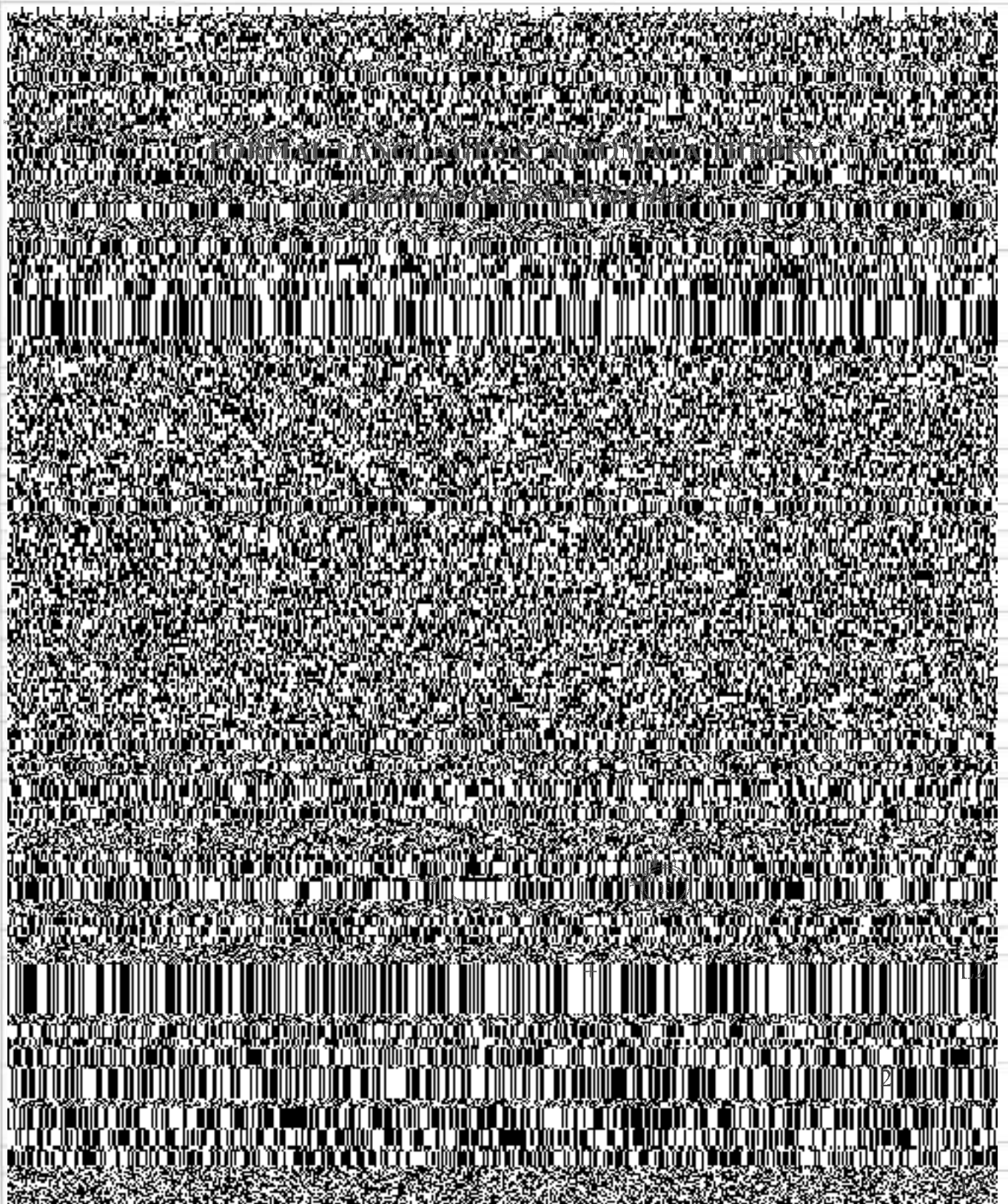




15	Obtain PDA to accept all strings generated by the language $\{a^n b^n n \geq 1\}$	10M	3	L2
	OR			
16	a. Explain CNF with example b. State and prove pumping lemma for CFG	5M 5M	3	L2
17	List and explain in details about the closure properties of Context Free Languages	10M	4	L2
	OR			
18	a. Explain how a Turing Machine can be used to compute functions from integers to integers. b. Design a Turing Machine to perform multiplication.	5M 5M	4	L2
19	What is diagonalization? Use diagonalization to show that the halting problem is unsolved.	10M	5	L2
	OR			
20	Explain Post Correspondence Problem with example.	10M	5	L2