



Cairo University - Faculty Of Engineering
Computer Engineering Department
Digital Communication - Spring 2025



Digital Communications: Assignment 2

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1 Part 1 Hand Analysis

1.1 Part 1-a: Transmitted baseband waveform

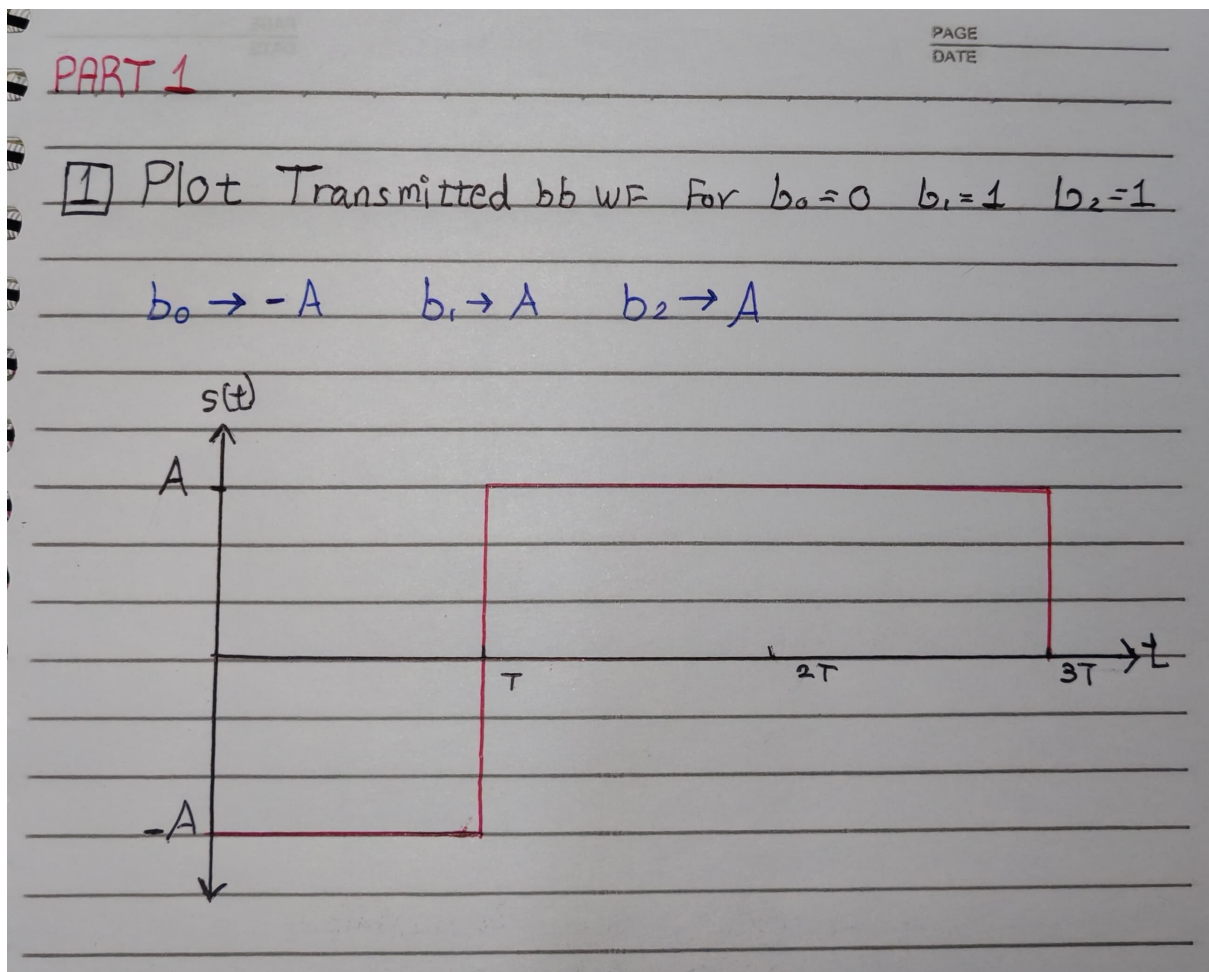


Figure 1: Transmitted baseband waveform

1.2 Part 1-b1: Matched Filter Output

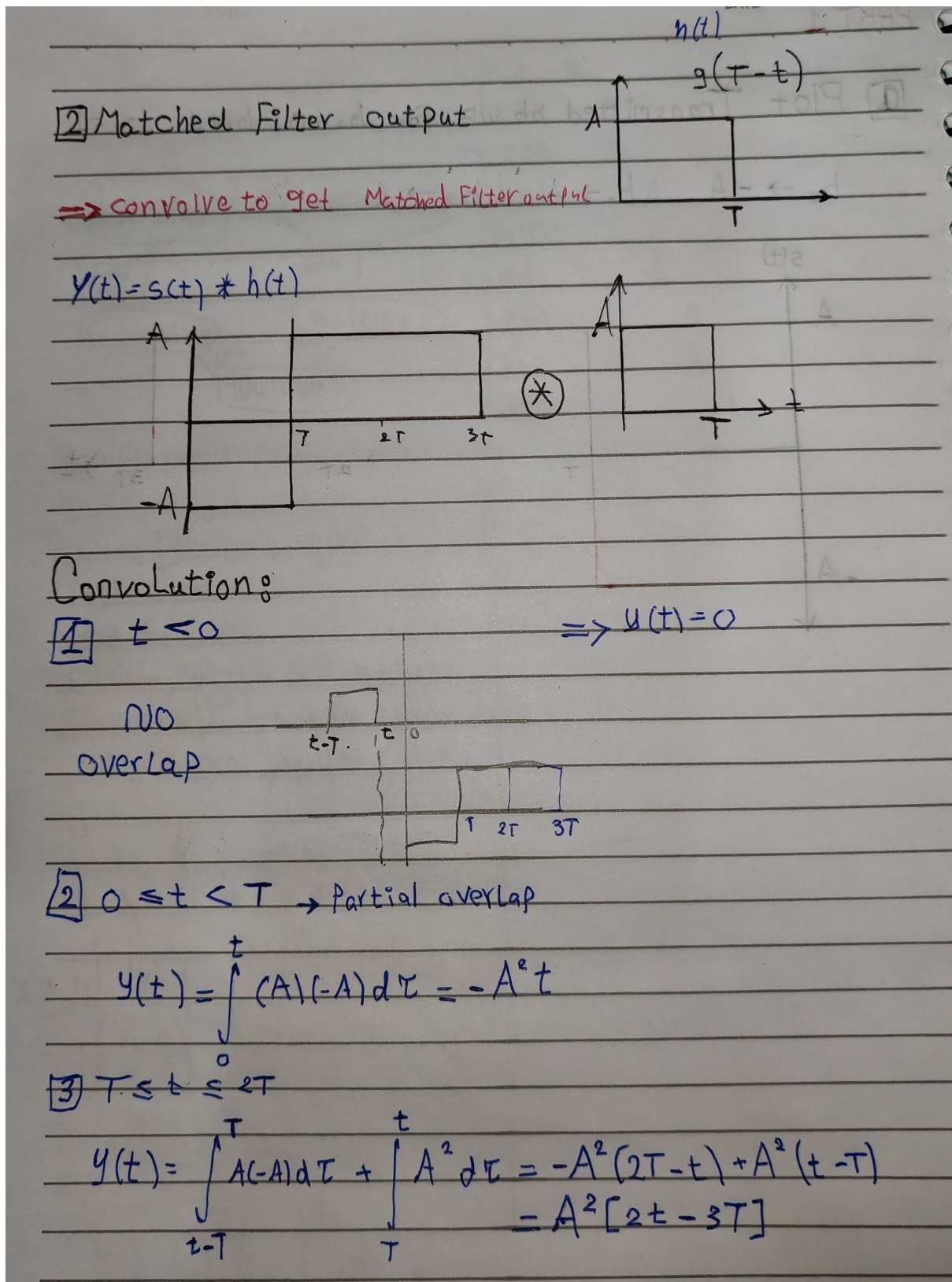


Figure 2: Matched Filter Output

1.3 Part 1-b2: Matched Filter Output continued

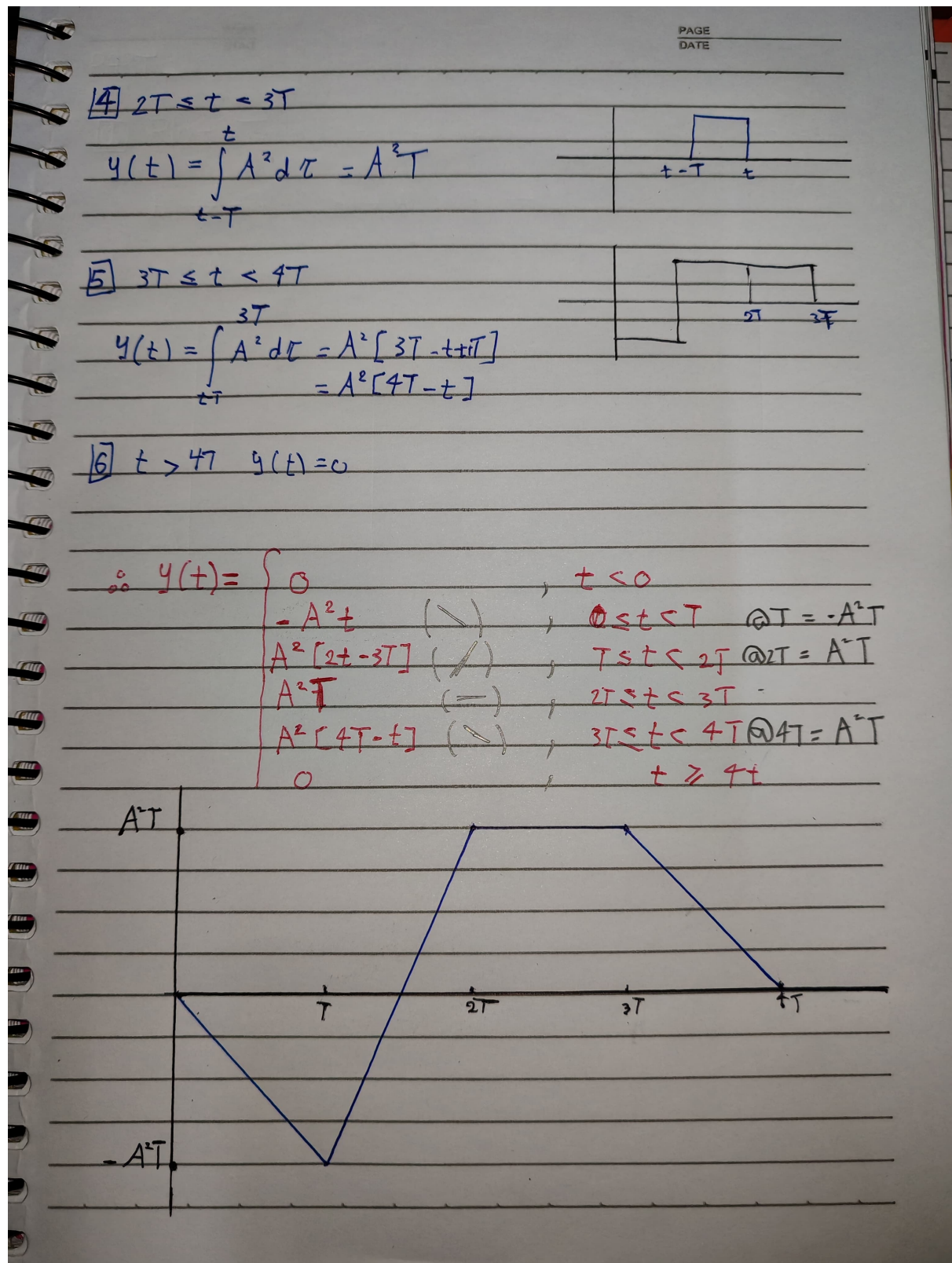


Figure 3: Matched Filter Output continued

1.4 Part 1-c: Sampling instances

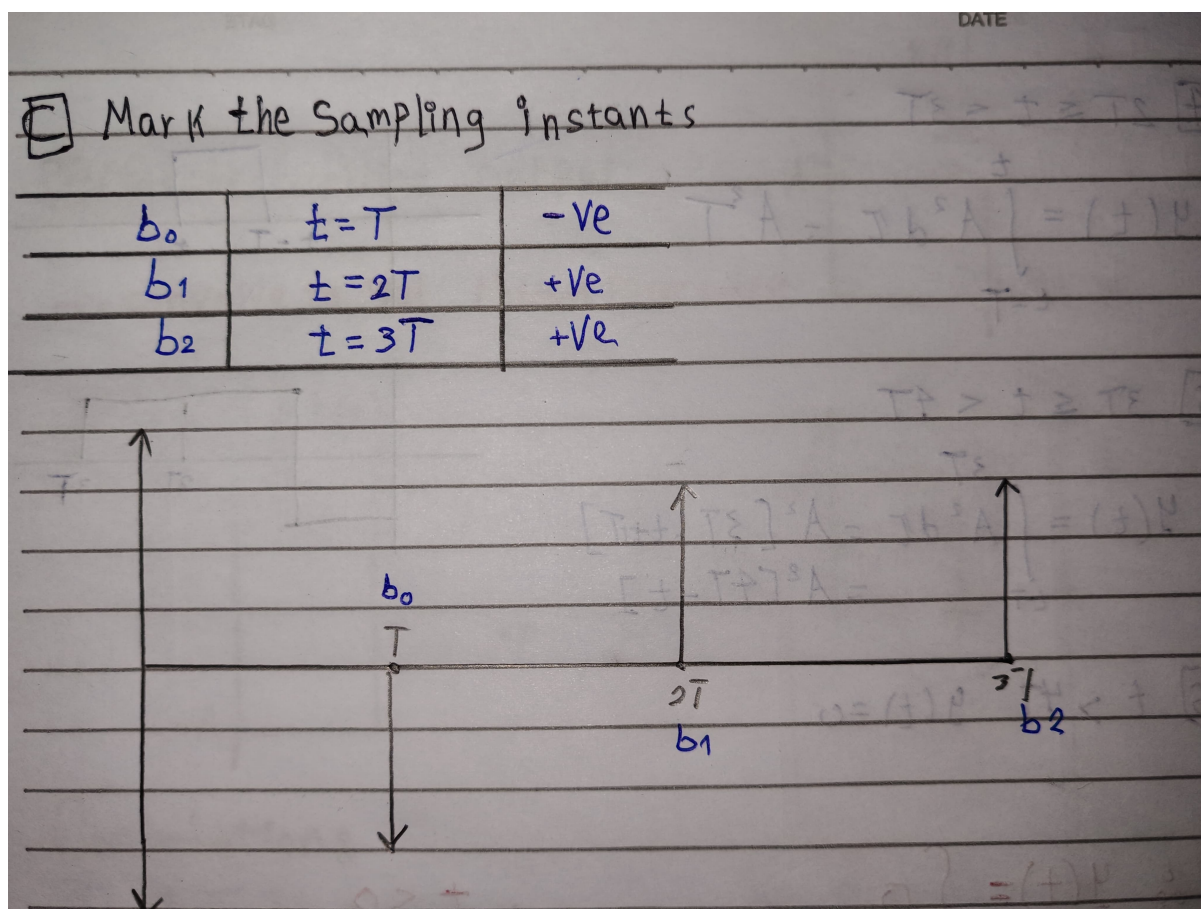


Figure 4: Sampling instances

1.5 Part 1-d: Transmitter Block Diagram

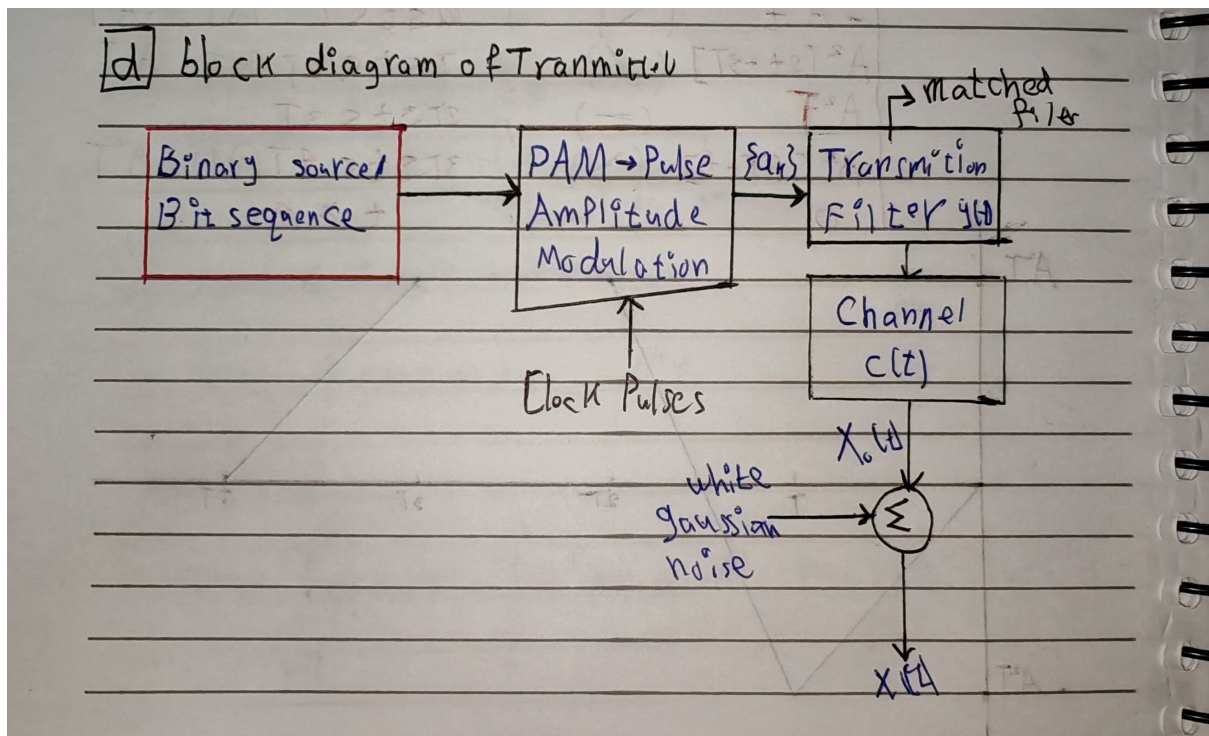


Figure 5: Transmitter Block Diagram

1.6 Part 1-e: Receiver Block Diagram

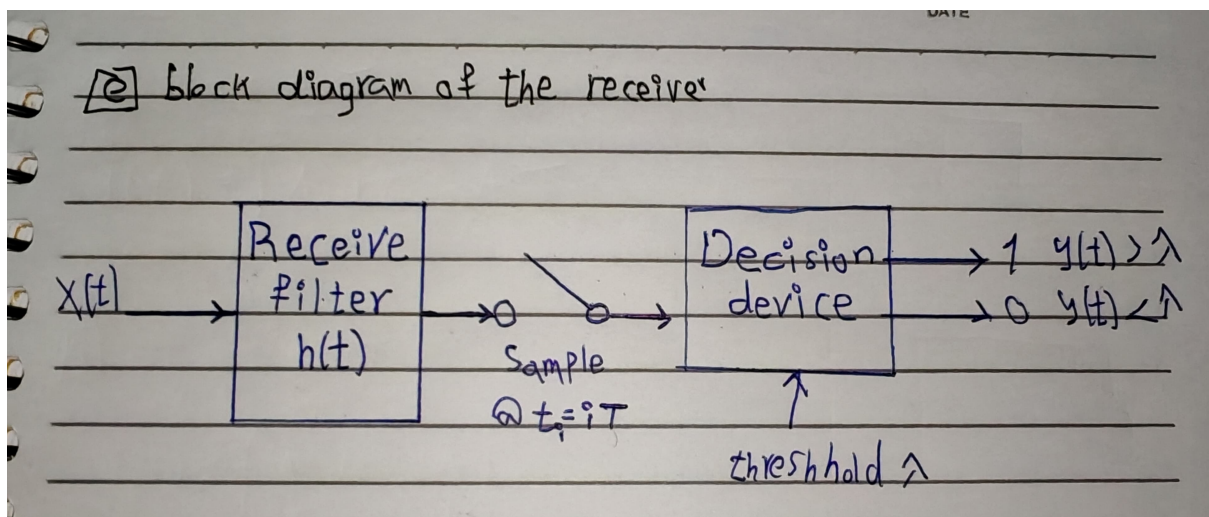


Figure 6: Receiver Block Diagram