Exam 2: OUT Thurs June 3 8am
Due Fri " 4 "

Content: Lectures 1-17. "Cumulative" Think Ser

① Cliff Notes from Exam 1

② Fourier
- How is the F.S. different from F.T.?
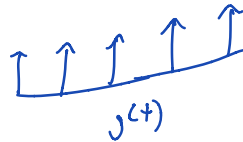- Properties of F.S. + F.T.
- Frequency Analysis of System
- Link b/w Fourier + LTI Systems
- Think about Limitations of F.T. $\implies$ Try to take F.T. of [graph]

③ Sampling
- $f(t) \cdot g(t)$ [delta train] $g(t)$
- Delta Train
- Understand Replicas and Precisely how it arises
- Aliasing $\rightarrow$ Replicas Overlap How do we combat aliasing?
  - Increasing Sampling
  - Anti-Aliasing Filter
- Maybe look at Visual Examples of Aliasing.
  - "Moiré" Aliasing ("shirts")

④ Laplace Transform

Not on
exam, unless
bonus ques.

- Why L.T.?
- Relation b/w L.t + F.T.
- " " " and LTI systems

  ✳ "Transfer function" $H(s)$

- Inverse L.T. computation

  ✱ "Cover-up Method"