# Exam2 Topics

* LaPlace and Z-Transforms
  + Focus on Z-Transforms (Digital)
  + Using the transform sum to find the Z-Transform
  + Applying a filter in the z-domain to find the Z-Transform of the output
  + Using partial fractions to find the inverse Z-Transform (aka the time sample sequence)
* Discrete Convolution – be prepared to actually compute the convolution of two pulse sequences
  + Flip, shift and add, repeat till done
  + Express one of the sequences as a sum of shifted pulses, find the shifted output sequence to each one, and add up the results ad each sample time
* Biomedical signals and signal Processing (The multiple choice section)
  + Signals
    - ECG
    - EEG
    - Ultrasonic imaging
    - Tomography (CAT scans)
  + Noise and noise reduction