Ben Van Roy Quals Questions 2015

1. What is a band-limited signal?

2. How frequently do I need to sample such a signal if I want enough data to reconstruct it?

3. If I modulate the signal by multiplying it by a sine wave. How frequently do I need to sample the modulated signal if I want enough data to reconstruct it?

4. If the sample times are generated by a Poisson process with an average frequency equal to the frequency you specified, will the samples still be sufficient to reconstruct the signal?