CE956: Statistical Learning Department of Computer Engineering Sharif University of Technology Spring 2019: Room CE204, Sat. & Mon.: 13:30-15:00

Quiz 03 (35 Points) – (March-16-2019)

Non-Parametric Models: (5 points each)

- 1. Briefly explain what is the Dirichlet Distribution and Dirichlet Process.
- 2. Why Dirichlet Process is important in the context of Bayesian Nonparametric Models.
- 3. What is the difference between CRP and IBP?
- 4. What is the relation between distributions over the binary matrics, CRP and IBP?
- 5. Why we need to perform sampling for inference purposes in the context of Bayesian Nonparametric Models?
- 6. Briefly explain what is Gibbs Distribution.
- 7. Briefly but concisely explain what MCMC is?