## Statistics II, 2019-20 Sem 2

**Meeting time:** M 11:10am to 1:10pm, WF 12:10pm-1:10pm

**Instructor:** Rituparna Sen

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Class website: https://www.isibang.ac.in/~rsen/StatII

**Exams:** All exams are closed book, closed notes. You can bring 2 pages of notes for

the midterm and 4 pages for the final.

Syllabus: Theory and Methods of Estimation and Hypothesis testing, Sufficiency,

Exponential family, Bayesian methods, Moment methods, Maximum likelihood estimation, Criteria for estimators, UMVUE, Large sample theory: Consistency; asymptotic normality, Confidence intervals, Elements of hypothesis testing; Neyman-Pearson Theory, UMP tests, Likelihood ratio and

related tests, Large sample tests.

Grading:

In-class quiz(5): 15% Midterm: 35% Feb 28, 2020 (AS) Final: 50% May 08, 2020 (AS)

## Suggested References:

1. George Casella and Roger L Berger: Statistical Inference

2. Peter J Bickel and Kjell A Doksum: Mathematical Statistics

3. Erich L Lehmann and George Casella: Theory of Point Estimation

4. Erich L Lehmann and Joseph P Romano: Testing Statistical Hypotheses