## **UE19CS203: Statistics for Data Science**

## ISA 1

## Format of the Question paper

Max. Marks: 60 Max. Duration: 2 Hours

Q No		Marks
1. a)		2
b)	Questions from Unit 1	2
c)		4
d)		2
2. a)		4
b)	<del></del>	4
c)		2
3. a)	Questions from Unit 2	2
b)		4
c)		4
4. a) 3		
4. a)	Questions from Unit 2	3
		4
c)		
5. a)		4
b)	Questions from Unit 3	3
c)		3
6 a)		4
b)	Questions from Unit 3	3
c)		3

## Note: The questions would be consist of

- 1. Identifying types of study, Identifying / Applying suitable sampling method, Data Cleaning Methods, Definitions, Extracting insights from the given graph and related problems (from Unit 1).
- 2. Identifying Distributions, Applications of linear transformation on random variables, Derivations, Methods for generation of random variates for the given distribution and related problems (from Unit 2).
- 3. Derivation of MLE for different distributions, Mean-Squared Error, Normal Probability Plot, Central Limit Theorem and its Applications, Continuity Correction, Constructing Confidence Intervals(Mean and proportion for large sample, Mean for small sample, Difference between two means of large samples, Paired data of small samples and related problems (from Unit 3).

Important Note: No Formulae sheet will be provided. However, z-table and t-table will be provided.