

Final syllabus and Marks distribution

Math -2205

1. Probability

- Simple probability
- Independent and mutually exclusive event
- Addition and multiplication rule
- Conditional probability
- Bayes' theorem

1 question with part of questions - 12 marks

2. Probability Distribution (Discrete & Continuous)

- Binomial Distribution
- Geometric Distribution
- Poisson Distribution
- **Normal Distribution**

1 question with part of questions - 12 marks

- Expectation and variance
- Linear combination of random variables
- Continuous random variable

1 question with part of questions - 12 marks

3. Statistical Inferences (Confidence interval)

- Point and Interval Estimation of Population
- Constructing a Confidence Interval to Estimate a Population Mean and Proportion

4. Statistical Inferences (Hypothesis test)

- Steps for performing a Significance Test
- Significance Tests about proportion
- Significance test about mean
- Decisions and Types of Error

1 question (3,4) with part of questions - 14 marks

Total 12+12+12+14 = 50 Marks