**Indian Statistical Institute**

**BSDS: 2024-26**

**First Year: Semester – II**

**Economics-II**

**Practical Exercise 13**

8 May 2025

1. **Suppose in a population the mean income, Lorenz Ratio and the number of people in the group of people with income below Rs. 10,000 per month are Rs. 7000, 0.2 and 500 respectively. Similarly, the mean income, Lorenz Ratio and the number of people in the group with income above Rs. 10,000 per month are Rs. 25000, 0.4 and 5000 respectively. Find the overall Lorenz ratio.**

**Ans:** Suppose the mean incomes, Lorenz Ratios and the numbers of people in the two groups are as follows:

Group 1 (below the income x\*): , and

Group 2 (above the income x\*): , and

and for the combined group these are μ, LR and n, say, where.

We know that

The overall LR is