

Problem Set 2

1. The following table shows the average per-capita consumption of cereals and prices of cereals in rural India for four different periods T_1 , T_2 , T_3 , T_4 . Calculate the price index number of cereals for the period T_4 taking T_1 as base adopting chain base formula and using Laspeyres' formula at each stage.

Commodities	Consumption (in Kg)/month				Prices (Rs per Kg)			
	T_1	T_2	T_3	T_4	T_1	T_2	T_3	T_4
Rice	8.69	7.94	7.58	8.28	37	39	52	52
Wheat	1.51	2.73	2.43	2.78	37	32	41	44
Other cereals	7.66	8.19	7.75	7.71	32	20	31	36

2. Consider the following dataset consisting observations on price and quantities of jute and tea for four successive years. Compute the fixed-base and chain-base indices using Laspeyres', Paasche, Edgeworth-Marshall and Fisher's formulae and write a report on comparing these indices.

Item	1965	1966	1967	1968
Jute quantity ('000 metric tons)	871	706	724	627
Jute unit value ('0000 Rs./'000 tons)	202	320	311	302
Tea quantity ('000 metric tons)	199	179	214	288
Tea unit value ('0000 Rs./'000 tons)	577	767	884	799