

Assignment

0. Analyse the stock prices data allotted to you.
1. Find the trend values of annual sales in million rupees of a trading organisation by fitting an appropriate trend equation.

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Annual Sales	80	84	80	88	98	92	84	88	80	100

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Annual Sales	84	96	92	104	116	112	102	114	108	126

2. The following table gives the yield-rate of rice in West Bengal for a number of years. Determine the trend values by means of moving averages of an appropriate period.

Year	Yield of rice (kg. per hectare)	Year	Yield of rice (kg. per hectare)
1951-52	920	1957-58	991
52-53	971	58-59	967
53-54	1243	59-60	960
54-55	959	60-61	1184
55-56	1025	61-62	1085
56-57	1082		

3. From the following table showing the monthly receipts of state govts in India, obtain seasonal indices using ~~if~~ Ratio-to
- (i) Ratio-to-moving average method
 - (ii) Ratio-to-trend method

Total Receipts of State Governments in India (Rs. Cr)

Month Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1952	23	39	82	17	18	16	20	17	12	22	20	18
1953	25	26	105	20	22	20	26	18	23	29	15	16
1954	32	36	93	21	21	22	29	21	13	27	27	21
1955	32	42	99	24	24	23	29	24	21	28	32	21

4. The seasonal indices of the sales of garments of a particular type in a certain shop are given below:

Quarter	Seasonal Index
Jan-Mar	97
Apr-June	85
July-Sep	83
Oct-Dec	135

If total sales in first quarter of a year be worth Rs. 15K, determine how much worth of garments of this type should be kept in stock by the shop-owner to meet the demand for each of the other three quarters of the year.