Computing Median for Ungrouped Data

Example 3. *Find out the median of 11, 12, 8, 5, 9, 14, 20, 15, 13.*

Sol. First of all, arrange these figures in ascending and descending orders as follows :

S. No.	*Ascending Order*	*Descending Order*
1	5	20
2	8	15
3	9	14
4	11	13
5	12 (M)	12 (M)
6	13	11
7	14	9
8	15	8
9	20	5
N = 9		

Month	*J*	*F*	*M*	*A*	*M*	*J*	*J*	*A*	*S*	*O*	*N*	*D*
Temp. °C	14	16	22	28	33	34	31	30	29	26	20	15

Sol. $\bar{X} = \frac{\Sigma X}{n}$, $\Sigma X = 298$, $n = 12$

$$= \frac{14+16+22+28+33+34+31+30+29+26+20+15}{12} = \frac{298}{12} = 24.83$$

Computing Mean from Grouped Data

Example 2. *The following table gives rainfall figures of a place. Calculate the arithmetic mean.*

Rainfall (in mm)	30–35	35–40	40–45	45–50	50–55	55–60	60–65	65–70	70–75
No. of days	5	6	11	18	19	15	13	1	2

Sol. This is a grouped data and arithmetic mean would be calculated as follows :

fall over 150 cms. The relative humidity should be nearly 90%. Well-drained alluvial loamy soils, which are frequently renewed by floods, are best-suited to the cultivation of jute.

About 83 per cent of the total jute is produced in West Bengal alone. Remaining jute is produced in Bihar, Assam, Orissa, Uttar Pradesh, Tripura and Meghalaya.

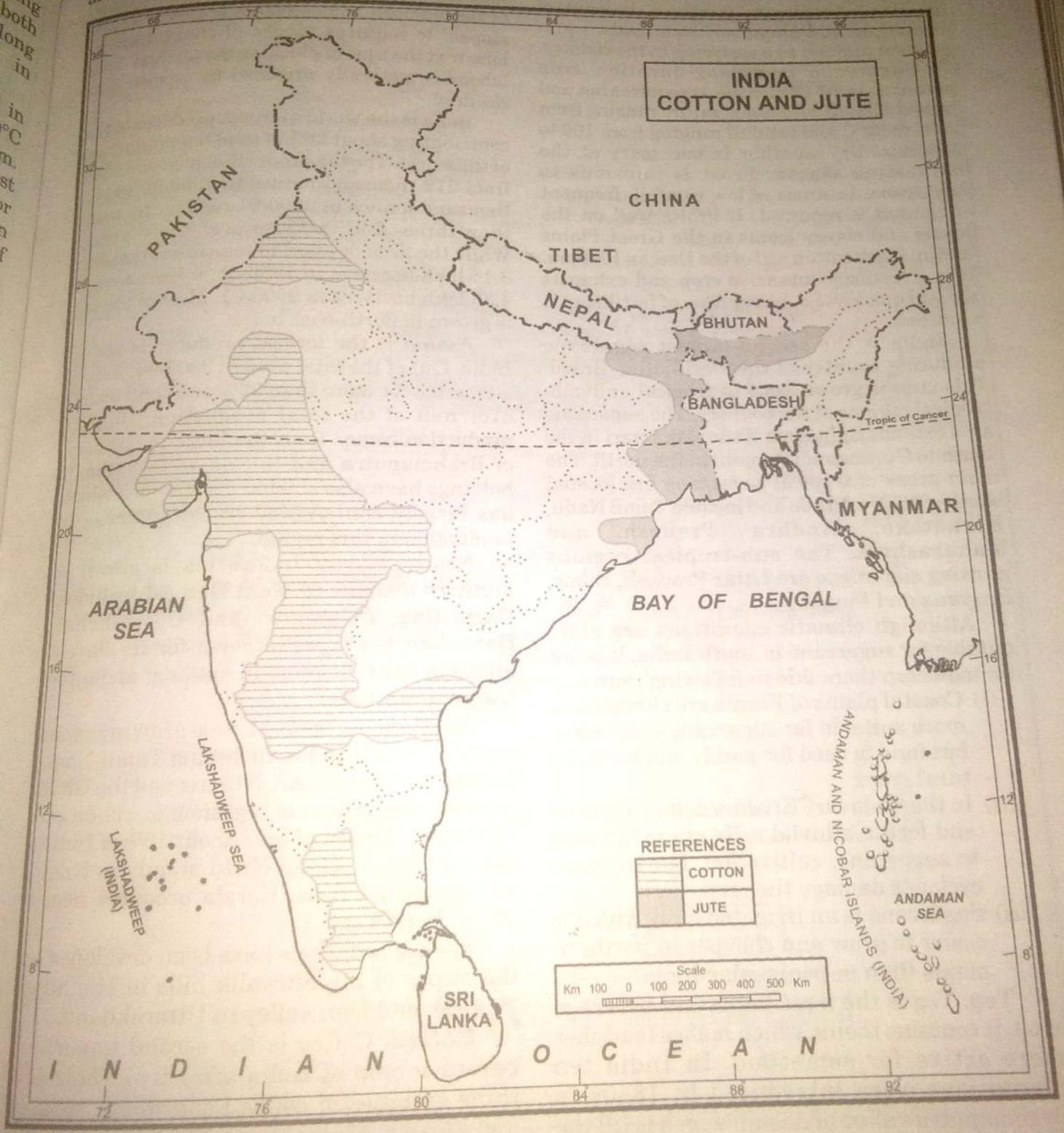

Fig. 5.4 INDIA : DISTRIBUTION OF COTTON AND JUTE