

INTERNATIONAL INDIAN SCHOOL RIYADH

WORK SHEET XI – ECONOMICS.

PART A – STATISTICS.

Chapter 5: Measures of Central Tendency

- Qn:1 Explain the characteristics of a good average.
- Qn:2 What is Arithmetic mean? Write two merits of Arithmetic mean.
- Qn:3 Mention any three merit of median.
- Qn:4 What is mode? Write three characteristics of mode.
- Qn:5 How are the Quartiles calculated in continue series?
- Qn:6 What is a measure of Center Tendency? Name at least four merits of mean.
- Qn:7 The following table gives the daily income of 6 works in a factory. Find Arithmetic mean by using : (i) Direct Method, (ii) Assumed mean method and (iii) Step – Deviation method.

Workers	A	B	C	D	E	F
Daily Income	120	150	180	200	250	300

- Qn:8 Calculate weighted mean of the following distribution:

Items	12	29	14	41
Weight	6	4	5	2

- Qn:9 Find Arithmetic mean for the following data using Step=Deviation method.

Temperature	- 40 to-30	- 30 to- 20	-20 to- 10	-10 to 0	0 to 10	10 to 20	20 to 30
No. of days	10	28	30	42	65	180	10

Qn:10 If the Arithmetic mean of the follow data is 28, find out the missing frequency.

X	0- 10	10-20	20-30	30-40	40-50	50-60
f	12	18	27	_____	17	6

Qn:11 Find out the median of the data given below by arranging them in ascending order:

X	160	150	152	161	156
f	5	8	6	3	7

Qn:12 Calculate median for the data given below:

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	10	5	5	10	15	5	10

Qn:13 Locate the median graphically from the following data:

Marks	0-10	10-20	20-30	30-40	40-50
No. of students	10	20	30	20	10

Qn:14 Calculate Q_1 and Q_3 from the following data:

Marks	10	20	30	40	50	60
No. of students	4	10	20	8	6	3

Qn:15 The following series relates to the daily income of workers employed in a firm. Compute :

- (i) Highest income of lowest 50% workers,
- (ii) Minimum income earned by top 25% workers and
- (iii) Maximum income earned by lowest 25% workers.

Daily income (Rs)	10-14	15-19	20-24	25-29	30-34	35-39
No. of workers	5	10	15	20	10	5

Qn: 16 Locate the mode graphically:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of students	5	10	20	25	20	10	5

Qn:17 Calculate mode in the following series:

Marks in Economics	10-19	20-29	30-39	40-49	50-59	60-69	70-79
Marks in Statistics	10	12	18	30	16	06	08

Qn: 18 What value do you give to the statement that arithmetic mean is independent of the change of origin and scale? Explain.

Qn: 19 An average is a single value with in the range of the data that is used to represent all the values of the series. It is also known as measure of central value.

Justify the statement that “an ideal average should be capable of algebraic treatment for further statistical calculations.”