

Descriptive Statistics

Question 1: Define Statistics.

Question 2: Define Branches of Statistics.

Question 3: Define Data and types of Data.

Question 4: Advantages and disadvantages of types of data.

Question 5: Steps for scientific method.

Question 6: Define Statistical terminologies:

- (a) Population
- (b) Sample
- (c) Types of sampling
- (d) Parameter and static.

Question 7: Define types of variables (Qualitative and Quantitative)

Question 8: Measurement Scales

Question 9: For the given data:

- (a) Construct the frequency distribution table (relative frequency and cumulative frequency.
- (b) Calculate measures of central tendencies, measure of dispersion, measure of symmetry (skewness) and measure of shape (kurtosis) numerically and verify it graphically for all the data sets using following graphs (where possible)
 - i. Stem and leaf plot
 - ii. Dot plot
 - iii. Bar chart
 - iv. Histogram
 - v. Frequency polygon/ super impose curve
 - vi. Ogive
 - vii. Pie chart

(a)

D	R	O	R	R	R	R	R
D	O	R	D	O	O	R	D
D	R	O	D	R	R	O	R
D	O	D	D	D	R	O	D
O	R	D	R	R	R	R	D

(b)

ENG	ENG	BUS	BUS	ENG
LIB	LIB	ENG	ENG	ENG
BUS	BUS	ENG	BUS	ENG
LIB	BUS	BUS	BUS	ENG
ENG	ENG	LIB	ENG	BUS

Number of TV sets in each of
50 randomly selected households

1	1	1	2	6	3	3	4	2	4
3	2	1	5	2	1	3	6	2	2
3	1	1	4	3	2	2	2	2	3
0	3	1	2	1	2	3	1	1	3
3	2	1	2	1	1	3	1	5	1

(c)

(d) A farmer obtained 60 sacks of rice this year. The weights of the Sacks in kg were as follows:

64	64	59	72	71	80
81	67	62	71	85	90
63	69	91	70	89	58
72	63	90	68	82	54
75	61	83	63	81	53
90	72	84	60	64	72
81	79	82	55	59	72
86	75	79	81	58	75
83	74	65	87	81	74
80	70	87	78	88	70

(e) The following data displays the number of days to maturity for 40 short-term investments. The data are from *BARRON'S* magazine.

70	64	99	55	64	89	87	65
62	38	67	70	60	69	78	39
75	56	71	51	99	68	95	86
57	53	47	50	55	81	80	98
51	36	63	66	85	79	83	70

For Further Practice follow:

Chapter #2 (Neil a Weiss 9th edition)

Q# 2.18 to 2.29

Q# 2.52 to 2.64

Q# 2.66 to 2.67

Q# 2.69, 2.72, 2.81, 2.81, 2.85, 2.86, 2.101, 2.109

Chapter 1 (Walpole 9th edition)

Q# 1.1 to 1.31