Q.1   Calculate Q_1 Q_3, D_9 D_{10} from the following

Marks less than	80	70	60	50	40	30	20	10
No. of students	100	90	80	60	32	20	13	5

Q.2   Calculate Mean, Median & Mode

Class Group	Frequency
2	1
3	2
4	2
5-7	3
7-10	5
10-15	10
15-20	8
20-25	4

Q.3   Calculate Mean, Median & Mode

Wages	No. of worker
Less than 20	5
Less than 40	12
20-60	29
60 & above	31
80-100	8
100 & above	19
120 & above	5

Q.4   Calculate started deviation & co. of variation

Temp.	No. of Days
-40 to -30	10
-30 to -20	28

-20 to -10	30
-10 to 0	42
0 -10	65
10-20	180
20-30	10

Q.5   Calculate co. of variation & state which company's lamps are more uniform.

Hours Life	Samples from	
	Com. A	Com. B
700 & under 900	10	3
900 & under 1100	16	42
1100 & under 1300	26	12
1300 & under 1500	8	3

Q.6   Calculate Bowleys coefficient of skewness

Size of collars	No. of shirts
0	1
2	3
3	2
4-5	4
6-9	7
10-14	3
15-25	1

Q.7   Calculate coefficient of skewness (Karl pearson)

Wages	No. of person
80 & above	5
75 & "	15
70 & "	40
65 & "	70
60 & "	90
55 & "	97
50 & "	100

Q.8   Calculate coefficient of correlation between Age & playing habit.

Age	15	16	17	18	19	20
No. of Students	250	200	150	120	100	80
Regular Players	200	150	90	48	30	12

Q.9   Find out relationship between density of population & death rate

Zone	Area	Population	No. of death

A	200	40,000	480
B	150	75,000	1200
C	120	72,000	1080
D	80	20,000	280

Q.10   Find relationship between Age & success

Age	18	19	20	21	22	23	24	25	26	27
% of failure	38	40	35	32	34	37	42	46	52	56

Q.11   Use the rank correlation to discuss which pair of judges has the nearest approach to common test.

I Judge	1	6	5	10	3	2	4	9	7	8
II Judge	3	5	8	4	7	10	2	1	6	9
III Judge	6	4	9	8	1	2	3	10	5	7

Q.12   Calculate Rank correlation.

X	50	55	65	50	55	60	50	65	70	75
Y	110	110	115	125	140	115	130	120	115	160

Q.13   Calculate mean of two series & co. of correlation
$$5x - 6y + 90 = 30$$
$$15x - 8y = 130$$

Q.14   Calculate the changes in the cost of living index of 2011 & 2012 as compare to standard price.

Exp.	%	2011	2012	Standard Price
Food	35	300	290	200
Rout	15	60	60	50
Clothing	20	150	130	100
Fuel	10	50	50	40
Misc.	20	80	100	80

Q.15   Calculate quantity index number & fisher index no.

Article	Price	Total exp.	Total Exp.	Quantity
A	3	150	280	28
B	1	100	120	60
C	2	120	180	30
D	5	150	144	12
E	4	160	216	8

Q. 16   Calculate the production of 2009 & 2011

Years	2006	2007	2008	2009	2010	2011	2012
Production	200	220	260	?	350	?	430

Q.17   Calculate value of the year 2013

Years	2008	2009	2010	2011	2012
Population	7	9	36	14	16

Q.18   Calculate the earning between 60 & 70

Wages	Below 40	40-60	60-80	80-100	100-120
No. of person	250	120	100	70	50

Q.19   Define statistics discuss its scope & limitations.

Q.20   What do you understand by secondary DATA ? Mention the various sources of secondary DATA, what precaution are taken while using them.