ASSINMENT -01 DATE-28.12.202

01. DEFINE MEAN, MODE, and MEDIAN.

02. DEFINE STANDARD DEVIATION AND VARAINCE. ?

03. DEFFINE POPULATION MEAN AND SAMPLE MEAN. ?

04. FIND MEAN, MEDIAN, MODE AND STANDARD DEVIATION FOR EACH DATA SET

7,11,16,14,11,13,19,13,13,
16,15,16,17,19,12,14,9,
27,66,24,81,50,40,74,81,97,

01.

MEAN-It is sum of all numbers are divided by total number.

MODE-It is middle number of list

MODE-It is most common number in the list or appeared more than any number in the list.

02.

STD DEVIATION-It is a number describe how spreads out values are. There are two types of deviation they are low and high STD deviation.

VARIANCE - It is a number describe how spreads out values are. It is a multiplication of std deviation

03.

POPULATION MEAN-Collection of all items of interest to our study and denoted with “N”.

SAMPLE-It is subset of population mean and denoted with “n”.

04.

a) 7, 11, 16, 14, 11, 13, 19, 13, 13

A) mean=(7+11+16+14+11+13+19+13+13)/9=13

B)median-7,11,11,13,13,13,14,16,19

median=((n+1)2) th obj= ((9+1)/2)=5 th obj= 13

C)mode=13

D)

STEP- 01 7-13=-6

11-13=-2

11-13=-2

13-13=0

13-13=0

13-13=0

14-13=1

16-13=3

19-13=6

STEP-02 (-6X-6)=36

(- 2X-2)=4

(-2X-2)=4

=0

=0

=0

=1=1

=3X3=9

=6X6=36

STEP-03

=(36+4+4+1+9+36+0+0+0)/9

=10

STEP-04

SD=SQ ROOT (10)

=3.1622

04.

b) 9, 12, 14, 15, 16, 16, 17, 19

mean=14.75

mode=16

variance

9-14.75=-5.75 -5.75x-5.75=33.0625

12-14.75=-2.75 -2.75x-2.75=7.5625

14-14.75=-0.75 -0.75x-0.75=0.5625

15-14.75=0.25 0.25x0.25=0.0625

16-14..75=1.25 1.25x1.25=1.5625

16-14.75=1.25 1.25x1.25=1.5625

17-14.75=2.25 2.25x2.25=5.0625

19-14.75=4.25 4.25x4.25=18.0625

=(33.0625+7.5625+0.5625+0.0625+1.5625+1.5625+5.0625+18.0625)/8

=8.44

Sd=2.90

04.

c)24, 27, 40, 50, 66, 74, 81, 81, 97

mean=60

median=66

mode=81

variance= 24-60=-36 -36x-36=1296

27-60=33 -33x-33=1089

40-60=-20 -20x-20=400

50-60=-10 -10x-10=100

66-60=6 6x6=36

74-60=14 14x14=196

81-60=21 21x21=441

81-60=21 21x21=441

97-60=37 37x37=136

=(1296+1089+400+100+36+196+441+441+1369)/9

=596.44

Sd=24.4