Seat	
No.	

Total No of Pages: 3

Kamala College, Kolhapur
(Autonomous)
B.C.A. (Part-I) (Semester-II)
NEP - 2020 Level – 4.5
Examination March/April, 2024.
OE 209-STATISTICS I (Paper - I)
Subject Code: OE 209



Total Marks: 40

Day and Date: Saturday, 13/04/2024 Time : 08:00 am to 10:00 am

Instructions:

IBRARY

- 1. Question 1 is compulsory.
- 2. Attempt any four questions from Que. No 2 to Que. 7
- 3. Figures to the right indicate total marks for the question.
- 4. Use of a simple calculator is allowed.
- 5. Each question carries 8 marks.

Q1)	Multiple	choice	Questions.
0.00			

[8]

- 1. If all observations in a set of observations are same, the variance of the set of values is:
 - a) One

b) Zero

c) Infinity

- d) Not possible to calculate
- 2. A shoe manufacturer wishes to manufacture only the most popular size shoes. Which measure of central tendency for the shoes can help him in arriving at the desired size
- a) Mean

b) Median

c) Mode

- d) None of the above
- 3. Variance of 5 observations 52,62,72,82,92 is 200,hence the variance of 57,67,77,87 and 97 is
- a) 205

b) 195

c) 200

- d) Not determinable
- 4. Which of the following is a measure of central tendency.
 - a) Quartile deviation

b) Mean

c) Standard deviation

d) None of the above

- 5. Which of the following is a unitless measure of dispersion?
 - a) Range

b) Mean deviation

c) Coefficient of variation

- d) Standard deviation
- 6. Which measure of central tendency is not affected by extreme values?
 - a) Mean

b) Mode

c) Both a and b

- d) None of the above
- 7. Which of the following is a measure of dispersion?
 - a) Range

b) S.D

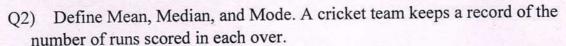
c) Variance

- d) All the above
- 8. The mean of the following data 40,50,55,78,58 is:
 - a) 57

b) 57.2

c) 56

d) 56.2



No.of runs	0	1	2	3	4	5	6	7	8
No.of overs	3	2	1	6	5	4	2	1	1

Calculate the same for the following data.

[8]

Q3) Define: S.D.,C.V

The runs scored by two batsmen in six innings of three test matches are given below:

Innings No.	1	2	3	4	5	6
Runs scored by Virat Kohli	65	35	20	80	5	6
Runs scored by Hardik Pandya	05	28	153	05	41	54

Examine the consistency in scoring the runs by two batsmen using C.V. [8]

- Q4) Explain why the sampling technique is better than the census method. What are the different methods of sampling? Explain any one of them in detail. [8]
- Q5) Define quartile deviation. Calculate quartile deviation and its coefficient from the following data. [8]



Weight(Ib)	110	120	130	140	150	160	170	180	190	200	210
	119	129	139	149	159	169	179	189	199	209	219
frequency	1	4	17	28	25	18	13	6	5	2	1

Q6) Define merits and demerits of median and mode. The marks obtained by 250 students in statistics are given below: [8]

Marks	0-10	10-20	20-30	30-40	40-50
No.of.Students	5	65	85	78	17

Compute median and mode from the data.

Q7) Attempt any two of the following:

[8]

a) A record of the number of printing mistakes observes per page in a book. Records are: 1,0,2,0,0,0,12,0,2,0,0,1,18,0,2,0,1
Find (a) mean (b) median (c) mode of records.

b) If quartile deviation of certain data is 40 and coefficient of Q.D is 0.2. Find two quartiles.

c) For the following data of exports of different countries, Draw a pie diagram to represent the data.

Countries	USA	Russia	China	Japan	India	Saudi Arabia
Export(in lakh Rs.)	450	225	620	560	150	265

