THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

Since 1881

MAS 1437/1440/2537/BBA 2421   **TIME: 3hrs**

BUSINESS STATISTICS   **MAX: 75**

ANSWER ANY FIVE QUESTIONS: **5x15=75**

1. Describe about collection of data.

2. Find (i) mean   (ii) range   (iii) S.D   (iv) mean deviation about mean and (v) coefficient of variation for the following marks of 10 students 20, 22,27, 30, 40, 48, 45, 32, ,31,35.

3. The following table gives the monthly wages of workers in a factory. Compute (i) standard deviation (ii) quartile deviation and (iii) coefficient of variation.

Monthly wages	No. of workers	Monthly wages	No. of workers
125-175	2	375-425	4
175-225	22	425-475	6
225-275	19	475-525	1
275-325	14	525-575	1
325-375	3	**Total**	**72**

4. Calculate the two regression equations of X on Y and Y on X from the data given below, taking deviations from actual means of X and Y.

Price (Rs.)	10	12	13	12	16	15
Amount demanded	40	38	43	45	37	43

5. Ten students obtained the following percentage of marks in the college internal test (x) and in the final university examination (y). Fine the correlation coefficient between the marks of the two tests.

x	51	63	63	49	50	60	65	63	46	50
y	49	72	75	50	48	60	70	48	60	56

6. Calculate Karl Pearson's coefficient of skewness for the following data.

    25   15   23   40   27   25   23   25   20

7. Calculate (i) Laspeyre's (ii) Paasche's   (iii) Fisher's   (iv) Edge-worth   and (v) Bowley'
   index numbers for the following data:

Commodities	Base year 1990		Current year 1992	
	Price	Quantity	Price	Quantity
A	2	10	3	12
B	5	16	6.5	11
C	3.5	18	4	16
D	7	21	9	25
E	3	11	3.5	20

****