SUB.CODE: 18UCO2C3 & 18UCOA2C3

REG.NO:

DHANALAKSHMI SRINIVASAN COLLEGE
OF ARTS & SCIENCE FOR WOMEN
(AUTONOMOUS)
(For Candidates admitted from 2020-2021 onwards)

UG DEGREE EXAMINATIONS APRIL – 2021
B.COM & B.COM(CA) - COMMERCE
BUSINESS TOOLS FOR DECISION MAKING

Time: 3 Hrs **Max.Marks: 75**

PART – A

CHOOSE THE CORRECT ANSWER **(10X1=10)**

1. Diagrams and graphs are tools of
   a) Collection of Data b) Analysis c) Presentation d) Summarization
2. The general term of an Arithmetic Progression is denoted by
   a) $t_n = a^* (n-1)d$ b) $t_n = a+(n-1)d$ c) $t_n = a/(n-1)d$ d) $t_n = a-(n-1)d$
3. Which of the following as a relative Measure of Dispersion.
   a) Mean b) Median c) Mode d) Quartile Deviation
4. What are the values lies between 5^{th} & 25^{th} Percentiles.
   a) 4 b) 3.6 c) 3 d) 1.5
5. Symmetrical Distribution, the co- efficient of skewness
   a) $\alpha_3 = 1$ b) $\alpha_3 = 3$ c) $\alpha_3 = 0$ d) $\alpha_3 = -1$
6. The Correlation Co-efficient between the variables X and Y is P, the correlation Co-efficient between X^2 and Y^2 is
   a) P b) P^2 c) 0 d) 1
7. The term Regression was introduced by
   a) R.A.Fisher b) Sir Francis Galton c) Karl Pearson d) None of the above
8. Times Series analysis helps
   a) To compare the two or more series b) To know the behavior of business
   c) To make Predictions d) All the above
9. Index Number are expressed in
   a) In Percentages b) In Rations c) In terms of d) absolute value
10. Factor reversal test Permits the interchange of
    a) base Periods b) Price & Quantity c) Weights d) None of the above

PART – B

ANSWER ALL THE QUESTIONS :- **(5 X 7 = 35)**

11. a) Explain the Characteristics of a Good Table

(OR)

b) Calculate the A.M, G.M & H.M of the following Quantities:3, 6,24, 48

12. a) Find the Mean Deviation ABOUT the mean for the following data.

18,20,12,14,19,22,26,16,19,24

(OR)

b) Calculate the Standard Deviation for the following data.

45,36,40,37,39,42,45,35,40,39

13. a) Find the Pearson's Co-efficient of Skewness for the following frequency Distribution.

Annual sales (in 000 RS.	No. of Items
0-20	20
20-40	50
40-60	59
60-80	30
80-100	25
100-120	16

(OR)

b) The following are the ranks obtained by 10 Students in Statistics & Mathematics

Statistics	: 1	2	3	4	5	6	7	8	9	10
Mathematics	: 1	4	2	5	3	9	7	10	6	8

To what extent is the knowledge of students in the two Subjects related?

14. a) The following table gives the age of cars of a certain make & annual Maintenance costs obtain the regression equation for costs related to age.

Age of cars (in years)	: 2	4	6	8
Maintenance Costs (in hundreds of RS)	: 10	20	25	30

(OR)

b) Calculate 5 yearly moving average of Number of Students Studying in a commerce college as Shown by the following figures.

Year	No. of Students	Year	No. of Students
1987	332	1992	405
1988	311	1993	410
1989	357	1994	427
1990	392	1995	405
1991	402	1996	438

15. a) On the basis of the following Information, Calculate the Fisher's Ideal Index number

	Base Year		Current Year	
Commodity	Price	Quantity	Price	Quantity
A	2	40	6	50
B	4	50	8	40
C	6	20	9	30
D	8	10	6	20
E	10	10	5	20

(OR)

b) Calculate by the weighted Aggregate method the Index Number from the following Data.

Commodity	Base year (Price Per unit)	Current year (Price Per unit)	Weight
Rice	30	40	10
Wheat	20	30	5
Pulses	40	50	6
Oil	35	40	5
Milk	40	50	

PART - C

ANSWER ANY THREE QUESTIONS **(3X10= 30)**

16. Find the Mean, Median and Mode for the following data & verify the empirical Relations.

CLASS	FREQUENCY
1-10	3
11-20	7
21-30	13
31-40	17
41-50	12
51-60	10
61-70	8
71-80	8.
81-90	6
91-100	6

17. Find the Quartile deviation and quartile co-efficient of Dispersion for the following Data.

Class	Frequency
0-5	3
5-10	5
10-15	8
15-20	12
20-30	34
30-40	46
40-50	28
50-60	14
60-70	10
Total	160

18. Find the Co-efficient of correlation by Concurrent Deviation method of the following Data

X	60	59	72	51	55	54	65
Y	23	36	10	38	33	44	33

19. Compute the appropriate regression equation from the following data.

X	Y
Independent Variable	Dependent Variable
2	18
4	12
5	10
6	8
8	7
11	5

20. Calculate the cost of living Index Number from the following data.

	Base year Price	Current year Price	Weights
Food	30	47	4
Fuel	8	12	2
Clothes	14	18	3
Rent	22	15	2
Miscellaneous	25	30	1