



Register Number:
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ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27
B.COM International Finance and Accounting - III SEMESTER
SEMESTER EXAMINATION: NOVEMBER 2020
BCIFA 3419 – BUSINESS STATISTICS

Time- 2 1/2 hrs

MaxMarks-70

This paper contains Three printed pages and four parts

SECTION A

Answer any FIVE of the following questions. Each question carries two marks (5x2=10)

1. State any four characteristics of statistics.
2. Mention the uses of Index numbers.
3. Name the types correlation.
4. Why Fisher's index number is called ideal?
5. List out the components of Time series.
6. Calculate Q1 and Q3 from the given data: 36, 45, 29, 18, 30, 57, 43

SECTION B

Answer any THREE of the following questions. Each question carries five marks. (3x5=15)

7. Describe the methods of collecting Primary data.
8. The arithmetic mean of the following distribution is 37 units. Find the missing frequency.

Sales (in units)	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of factories.	4	7	12	?	22	11	3

9. Find out the regression equation X on Y from the following data:

X	25	30	35	40	45	50	55
Y	18	24	30	36	42	48	54

10. Calculate index number on the basis of family budget method from the following data:

Commodity	Weight	Price per unit 2016 (Rs)	Price per unit 2019 (Rs)
A	30	27	35
B	20	15	30
C	10	13	28
D	15	11	52
E	25	22	60
F	10	30	70

SECTION C

Answer any TWO of the following questions. Each question carries fifteen marks. (2x15=30)

11. A) Explain the scope of statistics. (7)

B) Calculate Standard deviation from the following data: (8)

Expenditure (Rs)	100-200	200-300	300-400	400-500	500-600
No. of families	30	20	40	5	10

12. A) Calculate mode using grouping & analysis table from the following data: (10)

Daily income (Rs)	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of families	4	5	15	9	11	14	8	13	7	8

B) Find the value of Quartile deviation and co-efficient of Quartile deviation from the following data: (5)

Marks	25	30	40	50	60	70	80	90
No. of students	4	7	12	8	9	15	7	3

13. A) Following are the data related to the marks obtained by 10 students in two different subjects. Calculate Spearman's rank correlation co-efficient. (7)

Reg No:	1	2	3	4	5	6	7	8	9	10
Marks in Subject A	37	52	75	11	69	78	90	40	32	50
Marks in subject B	69	48	80	15	49	70	95	16	21	25

B) Compute the price index number by Fisher's ideal method and find out the consistency of the index number by Factor reversal test. (8)

Commodities	2014		2018	
	Price	Quantity	Price	Quantity
I	9	15	15	20
II	15	25	25	30
III	12	20	18	25
IV	21	32	20	35
V	8	40	9	30

SECTION D

Answer the following compulsory question. The question carries fifteen marks. (1x15=15)

14. The sales of a company from 2012-2018 are stated below:

Year	2012	2013	2014	2015	2016	2017	2018
Sales (in'000 tonnes)	47	57	62	75	84	88	97

Fit a straight-line trend by the method of least squares. Show the trend line on graph and estimate the sales for 2021 and 2023.

*****End of the paper*****