



St. Joseph's College of Arts & Science (Autonomous)
St. Joseph's College Road, Cuddalore – 607001

M. Sc DEGREE EXAMINATION – APRIL 2021

EPMB911Q – BIOSTATISTICS - (2019 Batch only)

Time : 3 hrs

Max Marks :75

Reg. No									
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Please send your soft copy of Answer Booklet to this Mail ID

mercy_sw@yahoo.com

SECTION – A (5X6=30)

Answer ALL the Questions

1. a) Find arithmetic mean for the following data.

X: 11 12 13 14 15 16

F: 3 6 9 11 7 4

(or)

- b) Find Standard deviation from the given data.

18 7 20 15 8 10 5 9 12 11

2. a) Calculate Spearman's rank correlation for following data. .

Marks in Statistics: 148 160 172 162 156 140 139 152 130

Marks in Geography: 162 178 165 170 138 154 160 132 131

(or)

- b) Construct the two regression equations for the following data

X: 6 2 10 4 8

Y: 9 11 5 8 7

3. a) Write advantages and disadvantages in sampling.

(or)

- b) Explain the merits and demerits of census method.

4. a) The marks obtained by 10 students by one and after coaching are given below

Before	84	48	36	37	54	69	83	96	90	65
After	90	58	56	49	62	81	84	86	84	75

Is the coaching effective?

(or)

- b) The marks obtained by 2 groups of students were as follows.

Group A : 18 20 36 50 49 36 34 49 41

Group B : 29 28 26 35 30 44 46

Test whether the two population have the same variance.

5. a) Explain the procedure for two way classification.

(or)

- b) Describe one way classifications.

SECTION – B (3X15=45)**Answer any THREE Question**

6. Explain Primary data collection.
7. Calculate Karl Pearson's co-efficient of Correlation from the below data.
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|---------------|----|----|----|----|----|----|----|----|
| Sales (x): | 61 | 72 | 73 | 63 | 84 | 80 | 66 | 76 |
| Expenses (y): | 40 | 52 | 49 | 43 | 61 | 58 | 42 | 58 |
8. Explain Non-Sampling Errors.
9. A random sample of 10 boys had the following I.Q's They are 60,62,64,68,61,66,69,70,62 and 63. Is it reasonable to believe that the average IQ is greater than 65.
10. The output of 5 processes are given below.
- | | | | | | | | |
|---|----|----|----|----|----|----|----|
| A | 20 | 28 | 42 | 36 | 29 | 40 | 28 |
| B | 18 | 22 | 29 | 43 | 40 | 28 | |
| C | 42 | 40 | 36 | 28 | 12 | 19 | 20 |
| D | 18 | 24 | 42 | 40 | 52 | 46 | |
| E | 40 | 20 | 12 | 19 | 17 | | |
- Test the above data with One way classification.
