

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

**Pharm.D / Pharm.D (POST BACCALAUREATE) DEGREE
EXAMINATION - July 2021
Fourth Year**

BIostatISTICS AND RESEARCH METHODOLOGY

Time: Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x15 = 30)

1. Write in detail correlation analysis
2. Calculate the standard deviation for the following values of BMI with systolic blood pressure.

BMI	23	18	16	21	22	28	24	20	16	17
Systolic blood pressure	120	125	126	130	145	121	141	135	152	149

3. Elaborate on sample size and power of study with examples.

II. Write short answers on any **SIX** questions: (6 x 5 = 30)

4. Prospective studies.
5. Types I error.
6. Confidence intervals.
7. Wilcoxon rank test.
8. Student t test
9. Computer application in community pharmacy
10. Explain chi square test
11. Write short note types of data

III. Write short notes on any **FIVE** question: (5 x 2 = 10)

12. Define variables.
13. What is bar diagram?
14. Randomization
15. What is relative risk?
16. Software for biostatistics.
17. Relative risk