

QP CODE: 105388

Reg. No:.....

**First Year Master of Optometry Degree Regular/Supplementary
Examinations November 2025**

Research Methodology and Biostatistics

Time: 3 Hours

Total Marks: 80

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*
- *The use of a simple calculator is allowed, but using scientific calculator or sharing any calculator is strictly prohibited under any circumstance.*

Essay

(20)

1. Describe the organization of data with appropriate examples in graphical representation.

Short Essays

(6x10=60)

2. Discuss about various sampling techniques for research studies.
3. What is Normal or Gaussian distribution. What are its different types and characteristics.
4. Given below is the data on Quality of Life score. Calculate the (i) mean, (ii) median, (iii) mode, (iv) standard deviation.

Participant #	1	2	3	4	5	6	7	8	9	10	11	12
Quality of life score	22	11	64	89	15	11	11	14	35	16	21	53

5. Describe about hypothesis testing in detail.
6. Discuss about the parametric and non- parametric tests with suitable examples.
7. Discuss about rates, ratios, proportions, incidence and prevalence with suitable examples.
