## THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1023] OCTOBER 2023 Sub. Code: 1902

## M.Sc. PUBLIC HEALTH FIRST YEAR (From 2017-2018 onwards) PAPER II – PRINCIPLES OF BIO-STATISTICS

Q.P. Code: 281902

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on:  $(2 \times 20 = 40)$ 

1. Explain in detail about Kaplan Meier Analysis and how to interpret it?

2. Define Validity. What are the different types of validity? How will you validate a questionnaire or instrument in medical research?

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Difference between standard deviation and standard error.
- 2. Explain in detail about Binomial distribution.
- 3. Correlation coefficient.
- 4. Explain in detail about systematic random sampling.
- 5. Tools for measuring validity of screening test.
- 6. Mann Whitney U test application and interpretation.
- 7. What is a variable? What are the different types of variables?
- 8. Statistical applications and its usage in medical research.
- 9. What is hypothesis statement? Explain about different types of hypothesis.
- 10. Calculate the measures of central tendency and dispersion for the following data of 5 student's weight 15,20,30,25,15.

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