

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

[AHS 1122]

NOVEMBER 2022

Sub. Code: 2604

B.Sc. RESPIRATORY THERAPY
FIRST YEAR (Regulation 2014-2015)
PAPER IV – BIO STATISTICS & PHYSICS
Q. P. Code: 802604

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

I. Elaborate on: **(3 x 10 = 30)**

1. Discuss about various levels of measurements of biological data.
2. Briefly explain sampling and non-sampling errors. How can you control these errors?
3. Write a general procedure for testing of hypotheses.

II. Write notes on: **(8 x 5 = 40)**

1. Clarify the difference between classification and tabulation.
2. Briefly discuss exclusive and inclusive class intervals.
3. Explain in brief pie-chart.
4. What are the properties of a good measures of central tendency?
5. What do you understand by the test of goodness of fit?
6. Define regression co-efficient and discuss its properties.
7. How is median test performed?
8. Discuss factors affecting Oxygenation and Ventilation.

III. Short answers on: **(10 x 3 = 30)**

1. What are the demerits of arithmetic mean?
2. What is the impact of extreme values of a set on median?
3. Define co-efficient of variation.
4. Give two examples for mutually exclusive events.
5. State the axioms of probability.
6. Define critical value.
7. Distinguish between descriptive and inferential statistics.
8. What is alternative hypothesis?
9. Define Gay Lussac's law.
10. Write the categories of gas flow in vacuum systems.
