B.Sc. RESPIRATORY THERAPY
FIRST YEAR
PAPER IV – BIO STATISTICS AND PHYSICS

Q.P. Code: 802604

Time: Three Hours   **Maximum : 100 Marks**

Answer All questions

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

1. The researcher have 500 respiratory rate value of pediatric pneumonic patient. The researcher is more interested to find the central distribution of this data set. To describe which type of test is used and what are the merits and demerits of this test.
2. With neat diagram explain the different types of graphs and the important points to be remembered in the construction of graphs.
3. Briefly explain various gas laws and derive Ideal gas equation.

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

1. Characteristics of good average.
2. Bias.
3. Test of significance.
4. Ho & H1.
5. Odds ratio, Risk ratio.
6. Chi square test.
7. Standard Deviation, Standard Error, Co efficient Of Variation.
8. Blinding.

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

1. Paired t test.
2. Population mean.
3. Skewness and kurtosis.
4. Confidence limit.
5. Significance of 2x2 contingency table.
6. Prevalence.
7. Rate, Ratio, Proportion.
8. Infant Mortality Rate.
9. ANOVA.
10. Write some statistical tool names which used for analysis?

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