# BACHELOR OF MEDICAL RECORD SCIENCE (B.M.R.SC.,) FIRST YEAR <br> PAPER V - BIO STATISTICS, HOSPITAL STATISTICS Q.P. Code : 704915 

Time : Three hours
Maximum : 100 marks

## Answer All questions.

## I. Elaborate on :

1. Discuss the procedure involved in Test of significance for large and small samples.
2. Which is the best Measure of Location? Why?
3. Calculate mean and standard deviation for the daily temperature recorded in a city

| Temperature in <br> Celsius | -40 to -30 | -30 to -20 | -20 to -10 | -10 to 0 | 0 to 10 | 10 to 20 | 20 to 30 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of days | 10 | 28 | 30 | 42 | 65 | 180 | 10 |

II. Write notes on :
( $8 \times 5=40$ )

1. What is meant by frequency distribution and state its characteristics.
2. Discuss on different types of measures of dispersion.
3. How we can find correlation graphically? Explain.
4. Discuss the different types of Probability samples.
5. State the difference between correlation and Regression.
6. In an experiment on the immunization of goats from anthrax the following results were obtained. Derive your inference on the vaccine.

|  | Died of Anthrax | Survived | Total |
| :--- | :---: | :---: | :---: |
| Inoculated with vaccine | 2 | 10 | 12 |
| Not inocultated | 6 | 6 | 12 |
| Total | 8 | 16 | 24 |

7. Calculate Median for the following data

| Wages (Rs.) | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Persons | 1 | 3 | 11 | 21 | 43 | 32 | 9 |

8. How will you represent the collected data?

## III. Short Answers on :

1. What are the essentials of questionnaire?
2. What is meant by Regression?
3. Brief on Type I and Type II errors.
4. What is meant by Range and Interquartile range?
5. Define Normal distribution.
6. When is paired $t$ test is used?
7. What is the merit of Histogram and Ogives?
8. How will you determine the basic hospital data?
9. Two students X and Y work independently on a problem. The probability that X will solve is $3 / 4$ and the probability that Y will solve is $2 / 3$. What is the probability that the problem will be solved.
10. Find Range and its Coefficient for $27,30,35,36,38,40,43$
