## **RAGAS DENTAL COLLEGE AND HOSPITAL**

## DEPARTMENT OF ORAL AND MAXILLOFACIAL PATHOLOGY

## **BIOSTATISTICS**

## 1<sup>ST</sup> October 2022 - 28<sup>TH</sup> December 2022

COURSE CODE: SRCC2022/02

DURATION: 30 HOURS



#### **Intended audience:**

Post-graduate students of All Departments

Course Co-ordinators: Dr.Ranganathan, Dr.Umadevi, Dr.Elizabeth, Dr.Rooban

#### **Faculty:**

All Staff members of Department of Oral Pathology

### **Course Outline:**

Biostatistics is the application of statistical reasoning to the biological sciences, and it provides the key to unlocking research data and evidence published in the scientific literature. Biostatistics can assist in determining the most effective strategy to treat populations. The programme aims to bring a common platform for students to get involved in statistical theory and practice. This course facilitates the exchange of new innovations and ideas through novel ways. It aims to inspire the postgraduate students to galvanize the research arena and expanding the scientific horizons of statistical thinking.

# **Course Plan:**

Week 1:	Data Management
	Collection, grouping, cleaning, attending to missing data
Week 2:	Computer applications and data management
	Basics of SPSS
Week 3:	Data in qualitative studies
Week 4:	Checking normality
	How? When? Why? What? Where?
Week 5:	Inferential statistics
Week 6:	Measures of central tendency
	Mean, median, mode, frequency, IQR
Week 7:	Variables, P -value: When to use? And when not to use?
Week 8:	Reporting of statistical analysis
	Tables, graphs, plots, pictorial representation, nomogram
Week 9:	Introduction of Bayesian theory
Week 10:	Survival analysis, Interpretation of statistics in discussion

#### Final Assessment:

Weekly – Assignment;

Monthly- viva voce;

End term: MCQ exam