

စကားဦး

Part-I: Research Methodology

- သုတေသနအမျိုးအစားများ ..... ၁
- သုတေသနဘာကြောင့်လုပ် ..... ၄
- သုတေသနလုပ်သင့်တဲ့ အခြေအနေ ..... ၅
- သုတေသနဦးစားပေးရွေးချယ်နည်း ..... ၇
- Format of a proposal (Protocol) ..... ၁၂
- Problem Analysis ..... ၁၇
- Research questions ..... ၂၀
- Literature Review ..... ၂၁
- Sources for literature review ..... ၂၁
- Reference system ..... ၂၄
- Web pages for literature resource ..... ၂၆
- Research Objectives ..... ၃၃
- Methodology on disease epidemiology ..... ၃၅
- Cross-sectional study ..... ၄၆
- Longitudinal study ..... ၄၇
- Analytical Epidemiology ..... ၅၀
- Case-control study ..... ၅၀
- Odds Ratio ..... ၅၈
- ဘက်လိုက်ခြင်း (Bias) ..... ၅၉
- Cohort study ..... ၆၂
- Relative Risk ..... ၆၉
- Attributable Risk ..... ၇၀

- Randomized Control Trial ..... ၇၅
- Non-randomized trial ..... ၈၄
- Sampling ..... ၈၇
- Sample Size Calculation ..... ၉၂
- Formula for sample size calculation ..... ၉၈
- Data collection techniques ..... ၁၀၄
- Research and Ethics ..... ၁၁၂

Part-II: Basic Statistics

- Introduction on data analysis ..... ၁၂၄
- Data to Information ..... ၁၂၅
- Steps in data analysis ..... ၁၂၆
- Data အမျိုးအစားများ ..... ၁၃၀
- Statistical Inference ..... ၁၃၈
- Estimation ..... ၁၃၈
- Confident Interval (စိတ်ချစည်း) ..... ၁၃၉
- Hypothesis testing ..... ၁၄၁
- Characteristics of good Hypothesis ..... ၁၄၂
- Significant level ( $\alpha$ ) ..... ၁၄၃
- Power ( $p$ ) ..... ၁၄၃
- Type I error ( $\alpha$ ) ..... ၁၄၃
- Type II error ( $\beta$ ) ..... ၁၄၃
- Statistics on Quantitative data ..... ၁၄၅
- Mean (သမတ်ကိန်း) ..... ၁၄၅
- Median (အလယ်ကိန်း) ..... ၁၄၈
- Mode (ကြိမ်များကိန်း) ..... ၁၄၉

- Measures of dispersion (ပျံ့နှံ့မှုကိုတိုင်းတာခြင်း) ..... ၁၅၀
- The Range (တာ) ..... ၁၅၁
- Percentile and Interquartile Range (IQR) ..... ၁၅၂
- The Mean Deviation ..... ၁၅၄
- Standard Deviation (စံသွေဖီခြင်း) ..... ၁၅၅
- Normal distribution ..... ၁၅၆
- Standard Normal Variate ..... ၁၅၇
- Standard error of the Mean (SE) ..... ၁၅၈
- Standard Error of the population ..... ၁၅၉
- Standard Error of Difference between two means ..... ၁၆၀
- Standard Error of the difference proportion ..... ၁၆၁
- Chi-Square test ..... ၁၆၂
- Fisher's exact test ..... ၁၆၅
- Correlation and regression ..... ၁၆၈
- T-test အကြောင်း ..... ၁၇၁
- Test validity ..... ၁၇၆
- Survival Analysis (Kaplan–Meier Analysis) ..... ၁၈၁
- Kappa Agreement ( $\kappa$ ) ..... ၁၈၂
- Data Presentation ..... ၁၈၃

Part-III: Appendixes

- Appendix 1. Random table ..... ၂၀၂
- Appendix 2. Glossary of statistics terms ..... ၂၀၅
- Appendix 3. References ..... ၂၂၂
- Appendix 4. List of e-book and resources in the attached CD ..... ၂၂၃
- ဆက်လက်လေ့လာပါ ..... ၂၂၄