M. OPTOM EXAMS (Candidates admitted from 2018-2019 onwards) FIRST YEAR

PAPER I – RESEARCH METHODOLOGY AND BIO-STATISTICS

Q.P. Code: 281621

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Various Study design with the appropriate examples.

2. Describe the normally distributed data and non-normally distributed data briefly note the specific test for the each data.

II. Write notes on: $(10 \times 6 = 60)$

- 1. MESH term.
- 2. Inform Consent and Patient Information Sheet.
- 3. Data Collection Methods.
- 4. Reference.
- 5. Rationale.
- 6. P value.
- 7. Critical area and Critical region.
- 8. Goodness of Fit.
- 9. ANOVA and MANOVA.
- 10. Difference between qualitative and Quantitative data.

NOVEMBER 2020 **Sub. Code: 1621** (MAY 2020 EXAM SESSION)

M. OPTOM

(Candidates admitted from 2018-2019 onwards) FIRST YEAR

PAPER I – RESEARCH METHODOLOGY AND BIO-STATISTICS

Q.P. Code: 281621

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Mention the various study designs and discuss in the detailed manner with example.

2. Probability and non probability distribution.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Research title formation and explain with example.
- 2. Finer formation.
- 3. Importance of ethical committee.
- 4. PUBMEd.
- 5. Literature review.
- 6. Correlation and Regression.
- 7. Measures of Central Tendency.
- 8. Level of significance.
- 9. Sample size.
- 10. F test.

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

[AHS 0321] MARCH 2021 Sub. Code: 1621

(OCTOBER 2020 EXAM SESSION) M.OPTOM

FIRST YEAR (From 2018-2019 onwards) PAPER I – RESEARCH METHODOLOGY AND BIO-STATISTICS

O.P. Code: 281621

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe the basic steps involved in conducting randomized controlled trials and discuss about the types of R.C.T.

2. How to present the research results with suitable example.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Observational Studies.
- 2. Patient Information Sheet.
- 3. Study Protocol.
- 4. Referencing Styles.
- 5. Choosing a Appropriate research topic.
- 6. Qualitative and Quantitative Data.
- 7. Type I and Type II Error.
- 8. Mean and Standard Deviation.
- 9. P Value and Confidence Interval.
- 10. Probability Sampling Method and its application in research.

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Sub. Code: 1621

[AHS 0921] SEPTEMBER 2021 (MAY 2021 EXAM SESSION)

M.OPTOM FIRST YEAR (From 2018-2019 onwards) PAPER I – RESEARCH METHODOLOGY AND BIO-STATISTICS O.P. Code: 281621

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Discuss Cohort studies and Case-control studies with suitable examples.
- 2. a) Principle of probability sampling.
 - b) Types of probability sampling.
 - c) Merits and demerits of each of the sampling techniques

II. Write notes on: $(10 \times 6 = 60)$

- 1. Review of Literature
- 2. Justification of a Study
- 3. Informed Consent
- 4. Primary and Secondary Data
- 5. Normal Distribution
- 6. Scales of measurement
- 7. Chi-square Test
- 8. Presentation of Data
- 9. Best measure of Central Tendency
- 10. Level of Significance and Power of the Test