

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

[AHS 0321]

MARCH 2021

Sub. Code: 2201

(OCTOBER 2020 EXAM SESSION)

M.Sc. RESPIRATORY THERAPY

FIRST YEAR (From 2019-2020 onwards)

**PAPER I – PRINCIPLES OF RESEARCH METHODOLOGY BIO-STATISTICS
AND MEDICAL ETHICS**

Q.P. Code : 282201

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. a) What are the differences between Experimental studies and Observational studies?
b) Discuss selection of controls in case-control studies.
2. Define sampling. Discuss the various sampling methods with its merits and demerits

II. Write Short Notes on:

(10x6 = 60)

1. Incubation period.
2. Bias.
3. Informed Consent
4. Pictorial representation of data
5. Multi Centric Trials.
6. Discuss the five major elements of medical ethics.
7. Role of ICMR in maintaining ethics in research.
8. Features of Good Research Design.
9. Steps in formulating a Research objectives/questions
10. Literature Survey.

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**SEPTEMBER 2021
(MAY 2021 EXAM SESSION)**

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FIRST YEAR (From 2019-2020 onwards)
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Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain observational study designs with illustrative examples and merits and demerits.
2. Scales of measurements and methods of data collection

II. Write Short Notes on:

(10x6 = 60)

1. Objectives of research problem and Hypothesis testing
2. Methods of non-probability sampling.
3. Masking in Clinical trials.
4. Measures of central tendency
5. Role of ICMR in maintaining ethics in research.
6. Uses of electronic devices in health data management.
7. Pilot Study.
8. Likert Scale
9. Graphical Representation
10. IRB
