

[LN 1018]

OCTOBER 2018

Sub. Code: 1901

**M.Sc. IN PUBLIC HEALTH EXAMS
FIRST YEAR
PAPER I – PRINCIPLES OF EPIDEMIOLOGY**

Q.P. Code : 281901

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the descriptive epidemiology and its significance.
2. Discuss the medical research ethics and its importance.

II. Write notes on:

(10 x 6 = 60)

1. Elaborate on Hill's criteria for causation.
2. Define surveillance. Explain Sentinel Surveillance with an example.
3. Write briefly on Non probability sampling.
4. Describe bias in epidemiological studies.
5. Define Epidemiology. What are the uses of epidemiological studies?
6. Explain the types of Blinding with an example of a study in which it is most essential.
7. Write briefly on Multivariate analysis.
8. Write a short note on Sample registration system.
9. Explain record linkage.
10. Functions of World Health Organization.

[LP 1019]

OCTOBER 2019

Sub. Code: 1901

M.Sc. IN PUBLIC HEALTH EXAMS

FIRST YEAR

**PAPER I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q.P. Code : 281901

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss Natural h/0 Diphtheria and the effectiveness of various levels of prevention.
2. You suspect the food at a newly established hotel in a town of 30,000 population to be the cause for increasing cases of Acid Peptic Disease. Describe the step by step procedure for establishing evidence by a cross-sectional study.

II. Write notes on:

(10 x 6 = 60)

1. Discuss the various parameters and their measurement to be included in a study on distribution of “harmful driving practices” in adolescents.
2. Compare and contrast Pathogenicity, Virulence and Incidence with an example.
3. Discuss “Human Development Index” as a measure of well-being.
4. What is bias? How will you identify the various bias in a given research?
5. Discuss usefulness of Receiver Operator characteristic curves in screening test.
6. Stratified Sampling – explain the methodology and the context where useful.
7. Discuss the five major elements of medical ethics.
8. Role of ICMR in maintaining ethics in research.
9. Discuss the ethical issues to be considered in a new drug trial.
10. Discuss the waxing and waning of Public health through history of medicine.

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

[AHS 0321]

MARCH 2021

Sub. Code: 1901

(OCTOBER 2020 EXAM SESSION)

M.Sc. PUBLIC HEALTH

FIRST YEAR (From 2017-2018 onwards)

**PAPER I – PRINCIPLES OF EPIDEMIOLOGY (INCLUDING FUNDAMENTALS
OF RESEARCH DESIGN & EVIDENCE BASED HEALTH)**

Q.P. Code : 281901

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define epidemiology. Enumerate the various epidemiological studies. Describe in detail experimental epidemiology.
2. Discuss in detail the procedures adopted for different sampling methods.

II. Write Short Notes on:

(10x6 = 60)

1. Disability adjusted life years.
2. Disability limitation.
3. Types of epidemics.
4. Attributable risk.
5. Notification of diseases.
6. Normal distribution.
7. Role of UNICEF in child health.
8. Evaluation of a screening test.
9. Isolation.
10. Explain Beneficence in medical ethics.

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

[AHS 0921]

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

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER I – PRINCIPLES OF EPIDEMIOLOGY (INCLUDING FUNDAMENTALS
OF RESEARCH DESIGN & EVIDENCE BASED HEALTH)**

Q.P. Code : 281901

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is epidemiological triad? Describe in detail the natural history of disease.
2. Describe the risk factors for hypertension. Explain primary prevention of hypertension.

II. Write Short Notes on:

(10x6 = 60)

1. Quarantine.
2. Types of screening for disease.
3. Investigation of food poisoning.
4. Cancer registration.
5. Cluster sampling.
6. Bias in case control studies.
7. Carriers of infection.
8. Herd immunity.
9. Emporiatrics.
10. Survey methods.

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[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 1901

M.Sc. PUBLIC HEALTH

FIRST YEAR (Candidates admitted from 2017-2018 onwards)

**PAPER I – PRINCIPLES OF EPIDEMIOLOGY (INCLUDING FUNDAMENTALS
OF RESEARCH DESIGN & EVIDENCE BASED HEALTH)**

Q.P. Code : 281901

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Explain the tertiary level of prevention. Define rehabilitation and describe the various types of rehabilitation with examples.
2. Give the steps for an epidemiological study to find out cause for a newly reported respiratory disease in a community.

II. Write Short Notes on:

(10x6 = 60)

1. Health promotion.
2. Uses of screening for disease.
3. Disability indicators.
4. Blinding.
5. Epidemiological significance of incubation period.
6. Community based rehabilitation.
7. Analysis of variance.
8. Write a short note on Sample registration system.
9. Distinguish between privacy and confidentiality.
10. Write about consumer protection act in health care setting.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER - I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q. P. Code: 281901

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

I. Elaborate on: **(2 x 20 = 40)**

1. Describe the risk factors for cancer. Explain primary prevention of cancer.
2. Discuss briefly about the steps in an outbreak investigation.

II. Write notes on: **(10 x 6 = 60)**

1. Bias in case control studies.
2. Informed consent.
3. Types of study designs.
4. Secondary attack rate.
5. Calculation of sample size.
6. Differences between incubation and quarantine.
7. Empiriatrics.
8. Phases of clinical trial.
9. Uses of screening for diseases.
10. Institutional Ethical Committee.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q. P. Code: 281901

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss about the levels of prevention with examples.
2. Discuss in detail about the investigation of an epidemic.

II. Write notes on:

(10 x 6 = 60)

1. Disability indicators.
2. Natural history of disease.
3. Types of screening.
4. Time trends in disease occurrence.
5. Bias in case control studies.
6. Analysis of variance.
7. Relative risk versus Attributable risk.
8. Carriers of infection.
9. Census enumeration versus sample enumeration.
10. Secondary attack rate.

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

[AHS 1024]

OCTOBER 2024

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q. P. Code: 281901

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Define Epidemiology. Classify the various Epidemiological studies. Explain in detail the steps in Case – Control Study.
2. Discuss in detail about the sources of Health Information.

II. Write notes on:

(10 x 6 = 60)

1. Types of Biomedical Research.
2. Basic Principles of Informed Consent.
3. Simple Random Sampling.
4. Stages of Drug trials.
5. Literature review in research paper.
6. Functions of ICMR.
7. Case Fatality Rate.
8. Measurement issues in Qualitative research.
9. Research in Stem cell therapy.
10. Steps in writing a research question.

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

[AHS 0525]

MAY 2025

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q. P. Code: 281901

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Define cohort studies. Discuss its types, advantages and limitations with a suitable example.
2. Describe the steps in investigating a foodborne disease outbreak. Explain epidemic curves and their significance in outbreak investigations.

II. Write notes on:

(10 x 6 = 60)

1. Discuss the importance of the Nuremberg Code in medical ethics.
2. Differentiate between Type I and Type II errors in hypothesis testing.
3. Write briefly on Non probability sampling and its types.
4. Explain the concepts: a) Herd Immunity b) Secondary attack rate.
5. Define Epidemiology. What are the uses of Epidemiological studies?
6. Different types of time trends in Epidemiology.
7. Explain the statistical ways to control confounding.
8. Write a short note on Census and Sample registration system.
9. Syndromic surveillance.
10. Stem cell therapy and its ethical concerns.

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 1901

**M.Sc. PUBLIC HEALTH
FIRST YEAR (From 2017-2018 onwards)
PAPER I – PRINCIPLES OF EPIDEMIOLOGY
(INCLUDING FUNDAMENTALS OF RESEARCH DESIGN &
EVIDENCE BASED HEALTH)**

Q. P. Code: 281901

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the natural history of disease and epidemiological triad.
2. Discuss briefly the principles of health research methodology.

II. Write notes on:

(10 x 6 = 60)

1. Measures of validity in screening.
2. Uses of Epidemiology.
3. Surveillance and monitoring.
4. Blinding.
5. Indian census.
6. Cluster sampling.
7. Confidentiality.
8. Research question and its significance.
9. Types of Epidemiological surveys.
10. Nuremberg code.
