

[KD 236]

APRIL 2001

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

1. Describe the Health care system in India. What are its strength and weakness? **(20)**
2. Write briefly on : **(30)**
 - a) Fertility index.
 - b) Social defence.
 - c) Demography gap.
 - d) Sullivan's index.
3. Describe the advantages of the Reproductive and Child Health Programme.
What are the benefits to the girl child? **(20)**
4. Write briefly on : **(30)**
 - a) National disaster management strategy.
 - b) Socialization.
 - c) HIV pandemic.
 - d) Radiation hazards.

[KI 236]

APRIL 2003

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

1. Discuss the concept and contents of National Health Planning.
Describe the cancer control programme in India in relation to the principles of planning strategies. **(20)**
2. Write briefly on : **(30)**
 - a) Central health council.
 - b) Cultural factors in health and disease.
 - c) “At Risk” infants.
 - d) Inter-sectoral co-ordination in primary health care.
3. Discuss the health hazards of environmental pollution in a city like Chennai.
Outline a programme for reduction of the same. **(20)**
4. Write briefly on : **(30)**
 - a) Barriers of Communication.
 - b) Clinical trials.
 - c) Under-Five mortality rate.
 - d) Integrated vector control.

[KK 236]

APRIL 2005

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum : 100 marks

**Sec. A & B : Two hours and
forty minutes**

Sec. A & B : 80 marks

Sec. C : Twenty minutes

Sec. C : 20 marks

Answer Section A and B in the SAME answer book.

Answer Section C in the answer sheet provided.

Answer ALL questions

SECTION – A

I. Elaborate on:

(2 x 15 = 30)

1. Describe the procedure in conducting a RCT.
(Randomized Control trial) selecting a suitable example.
2. What is Bias?
Describe the various types of bias in epidemiological studies and measures to tackle them.

SECTION – B

II. Write notes on:

(10 x 5 = 50)

1. Odd's ratio.
2. Confounding.
3. Ecological studies.
4. Etiologic fraction.
5. Sensitivity analysis.
6. Cost-benefit analysis.
7. Prevention of air pollution.
8. uses of life table.
9. Age specific death rates.
10. Net reproduction rate.

[KN 236]

AUGUST 2005

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum : 100 marks

**Sec. A & B : Two hours and
forty minutes**

Sec. A & B : 80 marks

Sec. C : Twenty minutes

Sec. C : 20 marks

Answer Section A and B in the SAME answer book.

Answer Section C in the answer sheet provided.

Answer ALL questions

SECTION – A

I. Elaborate on:

(2 x 15 = 30)

1. Describe the procedure in conducting a case-control study selecting a suitable example.
2. Describe the role of sample size and power consideration in research studies.

SECTION – B

II. Write notes on:

(10 x 5 = 50)

1. Attributable risk.
2. Attrition.
3. Double blinding.
4. Time cluster studies.
5. Decision tree.
6. Cost-effectiveness analysis.
7. Prevention of environmental pollution.
8. Census.
9. Standardised death rate.
10. Factors affecting demographic profile.

[KS 236]

MARCH 2008

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Trace the development of the reproductive and child health programme.
Describe the constraints in the implementation.
2. What is the impact of the demographic transition on the epidemiology of communicable diseases in India.

II. Write notes on:

(10 x 6 = 60)

1. Development assessment.
2. Dependency ratio.
3. Central Bureau of Health Intelligence.
4. Sample registration system.
5. Structural Adjustment.
6. Epidemic Curve.
7. Adaptation in biology.
8. Killed vaccines.
9. Anaemia Control.
10. Eye camps.

[KU 236]

MARCH 2009

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe different types of Bias in case control studies.
Explain the measures you will take to tackle them.
2. Describe the stages involved in the investigation of an epidemic.

II. Write notes on:

(10 x 6 = 60)

1. Relative risk.
2. Cost benefit analysis.
3. Retrospective cohort studies.
4. Sensitivity analysis.
5. Etiologic fraction.
6. Confounding factor.
7. Multiple linear regression.
8. Perfect positive correlation.
9. Blocking randomization.
10. Parallel screening tests.

[KV 236]

SEPTEMBER 2009

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. What are the reasons for the large demographic gap in India?
How can this problem be controlled.
2. What are the methods useful in comparing the effectiveness of different programmes?
Write the steps in comparing two possible programmes for controlling hypertension.

II. Write notes on:

(10 x 6 = 60)

1. Communication cycle.
2. Good cultural factors in maternal and child health.
3. Life table.
4. Sampling.
5. Indirect standardization.
6. Time series analysis.
7. Sex ratio.
8. Barriers in communication.
9. Socialization.
10. Air pollution.

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PART – I

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. You are the epidemiologist of a district.
How will you quantify the problem of malaria in the district, to enable planning of control measures.
2. Discuss epidemiologic transition in India.

II. Write notes on:

(10 x 6 = 60)

1. Discuss the essential variable required to study the natural history of diabetes mellitus in a community.
2. Discuss scenario where high positive predictive value and high negative predictive values are useful.
3. What are the statistical methods available to identify interaction between variables in a study?
4. Give an example where retrospective Cohort study can be used.
5. In a study of “respiratory illness”, what factors can cause selection bias?
6. Design a study to evaluate the effectiveness of “Modified leprosy Elimination Campaign” in control of leprosy.
7. Describe statistical analysis that can be used to analyse relationship between presence or absence of “distinction score” in the subject and the duration of lectures attended.
8. Differentiate time calculation while estimating “Cumulative incidence” and “Survival analysis”.
9. Registration of vital events act 2000.
10. Costing “Road traffic accidents”.

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION**FIRST YEAR****PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT****Q.P. Code: 313003****Time: Three Hours****Maximum: 100 marks****Answer ALL questions****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
-----------------	----------------	-----------------

- | | | | |
|--|----|---------|----|
| 1. How will you assess “functional status” in evaluating health as per the WHO guidelines? | 17 | 40 min. | 20 |
| 2. How will you estimate the fertility of a region? | 17 | 40 min. | 20 |

II. Write notes on:

- | | | | |
|--|---|---------|---|
| 1. Describe the variables required to study the spectrum of disease of Vitamin A deficiency. | 4 | 10 min. | 6 |
| 2. Advantages and limitations of using parallel and serial screening tests. | 4 | 10 min. | 6 |
| 3. Discuss confounding effect in a study and methods to overcome this. | 4 | 10 min. | 6 |
| 4. Advantages and limitations of nested case control study. | 4 | 10 min. | 6 |
| 5. In a study on efficacy of “Coaching class” in scoring marks discuss the need for comparison group. | 4 | 10 min. | 6 |
| 6. Differentiate screening and case finding under the Revised National Tuberculosis Control Programme. | 4 | 10 min. | 6 |
| 7. Prevalence of smoking in Chennai is 10% with 95% confidence interval of 0.1 to 19.9%. Discuss the meaning conveyed by this statement. | 4 | 10 min. | 6 |
| 8. How can sampling error be estimated? | 4 | 10 min. | 6 |
| 9. Dependency ratio – its implications. | 4 | 10 min. | 6 |
| 10. Cost utility analysis of “Quarterly family picnic programme” in improving work output. | 4 | 10 min. | 6 |

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION**FIRST YEAR****PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT****Q.P. Code: 313003****Time: Three Hours****Maximum: 100 marks****Answer ALL questions****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
-----------------	----------------	-----------------

- | | | | |
|--|----|---------|----|
| 1. Discuss the Epidemiological determinants of type 2 Diabetes mellitus? Briefly explain about screening in Diabetes? | 17 | 40 min. | 20 |
| 2. Classify Epidemiological studies? Explain in detail the design and steps in conducting a Randomized controlled trial? | 17 | 40 min. | 20 |

II. Write Notes on :

- | | | | |
|---|---|---------|---|
| 1. Proportional mortality rate. | 4 | 10 min. | 6 |
| 2. Receiver operating curve. | 4 | 10 min. | 6 |
| 3. Measurement of validity of a screening test. | 4 | 10 min. | 6 |
| 4. Sampling methods. | 4 | 10 min. | 6 |
| 5. Herd immunity. | 4 | 10 min. | 6 |
| 6. HIV surveillance. | 4 | 10 min. | 6 |
| 7. Assessment of Obesity. | 4 | 10 min. | 6 |
| 8. Demographic gap. | 4 | 10 min. | 6 |
| 9. Cultural factors in disease causation. | 4 | 10 min. | 6 |
| 10. Prevention and control of air pollution. | 4 | 10 min. | 6 |

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. a) What are the factors affecting fertility.
b) Enlist indicators of fertility of a population.
c) Discuss the various bias that can occur while collecting data on fertility indicators.
2. a) Describe group dynamics
b) Explain with an example how knowledge of group dynamics can be used make small group tutorials effective.

II. Write notes on:

(10 x 6 = 60)

1. Barriers to effective communication.
2. Cultural practices in India that affect environmental sanitation.
3. Measures to prevent air pollution.
4. Engineering measures to control work related Injury.
5. Explain with an example the learning principle of “learning by doing”
6. National Birth and Death Registration act 2000.
7. Opportunity cost.
8. Impact evaluation of the program - weekly supplementation of iron tablets to adolescent school girls.
9. Standards and Eligibility criteria for providing MTP services.
10. Pregnancy and Infant Cohort Monitoring and Evaluation.

[LD 1013]

OCTOBER 2013

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Enumerate the Bradford Hill's criteria's for Judging causal Association of a risk factor with a Disease?
Explain in detail about each criteria in context to "smoking & lung cancer" hypothesis?
2. Discuss the Epidemiology of Industrial accidents and briefly mention the strategies for prevention and control of accidents in workplace?

II. Write notes on:

(10 x 6 = 60)

1. Types of epidemics and epidemic curve.
2. Bias in Epidemiological studies and measures to avoid them.
3. Estimation of risk in Cohort studies.
4. Concept of Social Defence.
5. Standard normal curve.
6. Cross-sectional studies.
7. One way Analysis of Variance.
8. Principles of health education.
9. Indicators for measuring the burden of Coronary Heart Disease in a community.
10. Steps in investigation of a outbreak of acute diarrheal disease in a Sub centre area.

[LE 0414]

APRIL 2014

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Write in detail about National Rural Health Mission.
2. What are the reasons for the large demographic gap in India, how can this problem solved.

II. Write notes on:

(10 x 6 = 60)

1. Sensitivity analysis.
2. Air pollution.
3. Disaster management strategy.
4. Cost utility analysis.
5. Health education.
6. Prevention of Road traffic accidents.
7. Barriers in communication.
8. Anemia control.
9. Decision tree.
10. Crude death rate.

[LF 1014]

OCTOBER 2014

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Define Health Education.

Discuss the Approach, Models and Principles of Health Education.

2. Classify the causes for high Infant Mortality Rate (IMR), in India.

Discuss the steps taken by the government to reduce it.

II. Write notes on:

(10 x 6 = 60)

1. Monitoring and Evaluation of National Iodine Deficiency Programme.

2. Importance of Case Fatality Rate.

3. Surveillance of Water Quality.

4. Child Sex Ratio.

5. Census 2011.

6. Focus Group Discussion.

7. Plumbism.

8. Barrier in Communication.

9. Cost Accounting in National Immunization Programme.

10. Differences between Growth and Development.

[LG 0415]

APRIL 2015

Sub. Code: 3003

M.Sc., (EPIDEMIOLOGY) DEGREE EXAMINATION

FIRST YEAR

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code: 313003

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Classify Occupational hazards and diseases.
Discuss it's prevention and control in Agriculture sector.
2. Causes of Under Five Mortality.
Describe in detail the strategies to reduce Under Five Mortality.

II. Write notes on:

(10 x 6 = 60)

1. Types of family and it's role in health and disease.
2. Define sanitation Barrier.
3. Family Health Survey 2006.
4. Net Reproduction Rate.
5. Goitre survey.
6. Spurious Association.
7. Trace Elements in Nutrition.
8. Statistical Association.
9. Estimation of Midyear Population.
10. Genetic markers.

[LJ 1016]

OCTOBER 2016

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY EXAMS
FIRST YEAR
PAPER III – EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT**

Q.P. Code : 313003

Time : Three hours

Maximum : 100 Marks

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

1. Write the sources of air pollution. List different strategies to control air pollution.
2. Discuss the causes of maternal mortality in India. List the strategies under National Health Mission to prevent maternal deaths.

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

1. Effects of rapid urbanization on health.
2. Road safety measures.
3. Sample registration system.
4. Principles of health education.
5. Factors affecting demographic profile of a community.
6. Standardized mortality rate.
7. Role of family in health.
8. Integrated Child Development scheme.
9. Cost effectiveness analysis.
10. Sex ratio in India.

[LL 1017]

OCTOBER 2017

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY EXAMS
FIRST YEAR
PAPER III – EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT**

Q.P. Code : 313003

Time : Three hours

Maximum : 100 Marks

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

1. “Disease Surveillance”. Discuss its importance, existing system for surveillance and its challenges.
2. Discuss the phases of social marketing with the PRECEDE model.

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

1. Discuss the “Imperfect market” in health which limits economic estimation.
2. Discuss the opportunities and obstacles the family has in development of adolescents.
3. Discuss method of sewage disposal at a municipality level.
4. Compare and contrast General Fertility Rate and Crude Birth Rate.
5. How will you assess need for “iodine supplementation” for a given population group?
6. Discuss utility of qualitative methods of epidemiology in infant care.
7. Describe how to design a study to measure impact of protective device in reducing radiation exposure in radiologists.
8. Describe environmental factors that predispose to road traffic accidents.
9. Discuss DNA mapping and its utility in health care.
10. Daylight Factor.

[LN 1018]

OCTOBER 2018

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY EXAMS
FIRST YEAR
PAPER III – EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT**

Q.P. Code : 313003

Time : Three hours

Maximum : 100 Marks

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

1. Describe the various Cultural factors affecting Health and Disease.
2. Describe the various Factors affecting Fertility and enumerate the Fertility related Indicators.

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

1. What are the Hazards of Noise Pollution and how will you control Noise Pollution?
2. List the Barriers in Communication.
3. How will you assess the “Vitamin A deficiency” in a given population?
4. Describe the various Methods in Economic Evaluation.
5. Describe the Modern Sewage Treatment Plant.
6. Describe the “Assessment of Dietary Intake” in a given population.
7. List the Sources of Air Pollution and describe the Strategies to control Air pollution.
8. Describe the various Epidemiological factors in Road Traffic Accident (RTA).
9. Describe the Role of Genetic Predisposition in Common disorders.
10. What are the effects of Industrialization on health?

[LP 1019]

OCTOBER 2019

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY EXAMS
FIRST YEAR
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH
MANAGEMENT**

Q.P. Code: 313003

Time: Three hours

Maximum: 100 Marks

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

1. Define Health Education. Describe the stages of adoption of new ideas and practice with one example.
2. Discuss in detail about the Evaluation of Health Services.

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

1. Write in brief about Iodine deficiency disease control programme.
2. Write briefly on Integrated Child Development Services (ICDS).
3. Discuss the strategies for reducing Infant mortality rate in India.
4. Write briefly on Standardized death rate.
5. Discuss in brief about health problems due to industrialization.
6. Briefly write about Zero population growth.
7. Write a note on census.
8. What are the indicators of fertility?
9. Write a note on ozone depletion.
10. Describe the relation between disease and social conditions.

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

[AHS 0321]

MARCH 2021

Sub. Code: 3003

(OCTOBER 2020 EXAM SESSION)

M.Sc. EPIDEMIOLOGY

FIRST YEAR (From 2011-2012 onwards)

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code : 313003

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Describe the various steps in planning a new program.
2. Discuss the various preventive measures to reduce obesity in a community.

II. Write Short Notes on:

(10x6 = 60)

1. Write briefly on the 'Factories Act' in India.
2. Discuss the impact of migration on health and disease.
3. List the various indicators to evaluate the family planning program at the district level.
4. Write briefly how primary health care is delivered in the rural areas of India.
5. Discuss the various ergonomic measures to prevent injury in work place.
6. Discuss the difference between the 'cost effectiveness analysis' and 'cost utility analysis'.
7. Write briefly on the 'Janani Suraksha Yojana' Scheme.
8. Describe the sources of data on fertility in India.
9. Discuss the importance of 'SWOT analysis' in program management.
10. Write briefly on the Registration of Birth and Death Act in India.

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

[AHS 0921]

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

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY
FIRST YEAR (From 2011-2012 onwards)
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT
*Q.P. Code : 313003***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Discuss the strategies under National Health Mission to reduce maternal mortality in India.
2. Briefly write the various methods of assessing the nutritional status of a community.

II. Write Short Notes on:

(10x6 = 60)

1. Write briefly on the benefits to employees under the ESI Act.
2. Discuss the impact of globalization on health and diseases.
3. List the various indicators to evaluate the Integrated Child Development Services (ICDS) program.
4. Discuss the various environmental factors causing road traffic accidents.
5. Briefly write how 'cost of illness' analysis is done.
6. Briefly discuss the need for universal health coverage and the challenges in implementing it.
7. Write briefly on the 'food standards' in India.
8. Discuss the various factors which affect the total fertility rate of a region.
9. Write briefly on national program for control of blindness in India.
10. Discuss the importance of 'Gantt chart' in program management.

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

[AHS 0222]

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

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY
FIRST YEAR (From 2011-2012 onwards)
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT
Q.P. Code : 313003**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Briefly describe the adolescent health program in India and the challenges in implementing it.
2. List the common nutritional disorders in children. Briefly discuss the national programme aiming at implementing nutritional status of children in India.

II. Write Short Notes on:

(10x6 = 60)

1. Discuss the various measures an industry should adopt for the prevention of occupational diseases.
2. List the various indicators to evaluate the immunization program at the district level.
3. Write briefly on the Integrated Disease Surveillance project and its importance.
4. Discuss the role of family and society in prevention of suicides.
5. Describe the 'cost minimization analysis' with an example.
6. Discuss the impact of ill-health on the household economy.
7. Discuss the health hazards of health-care waste.
8. Discuss briefly how national census is done in India.
9. Discuss the criteria for priority setting in health care interventions.
10. Discuss the various measures to control noise pollution in cities.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY
FIRST YEAR (From 2011-2012 onwards)
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT**

Q.P. Code : 313003

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Discuss briefly the operationalization of interventions of adolescent health program in India.
2. Discuss anaemia as a public health problem. Discuss briefly the preventive and control measures of nutritional anaemia in India.

II. Write Short Notes on:

(10x6 = 60)

1. Write briefly on Integrated Disease Surveillance Project.
2. Discuss the health hazards of health care waste.
3. Discuss briefly about Indian census.
4. Write briefly about decision analysis.
5. Discuss briefly the epidemiology of road traffic accidents.
6. Discuss about the factors affecting demographic profile.
7. List the various steps to evaluate a health education program.
8. Discuss briefly the principles of learning.
9. Discuss the various measures to control noise pollution.
10. Discuss the impact of urbanization on health and disease.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY
FIRST YEAR (From 2011-2012 onwards)
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT**

Q.P. Code: 313003

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. What is Age Pyramid? Discuss the consequences of its change to an Inverted Pyramid.
2. Discuss cultural practices that promote health and those that are harmful. How can you study them using research?

II. Write Short Notes on:

(10x6 = 60)

1. Discuss the difference in estimating population using Arithmetic and Geometric projection methods.
2. How does the following death rates differ and help in planning - Crude death rate, Disease specific death rate and case fatality rate.
3. Brief note on government program for control of anaemia.
4. How would you monitor the implementation of Acute Diarrhoeal Disease control component of RCH Program?
5. How would you measure chemical exposure in employees of a paint factory, for risk assessment?
6. What are the medical facilities under the ESI Act?
7. How would you choose the best strategy for screening for developmental delay, when two tests are available with the following parameters - Test 1 (Sensitivity 80%, Specificity 90%), Test 2 (Sensitivity 92%, Specificity 86%)?
8. Discuss the new guidelines for molecular research as per ICMR guidelines 2017.
9. Differentiate Cost benefit and Cost Utility evaluation with an example.
10. What would be the PROCESS components to be evaluated in the National Program for control of Blindness?

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

[AHS 1025]

OCTOBER 2025

Sub. Code: 3003

**M.Sc. EPIDEMIOLOGY
FIRST YEAR (From 2011-2012)
PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT**

Q.P. Code: 313003

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2x20=40)

1. How would you design a community trial to assess the impact of a new nutrition program in rural Tamil Nadu? Explain with an example.
2. How does the epidemiological triad apply to non-communicable disease control in Tamil Nadu? Give suitable examples.

II. Write Short Notes on:

(10x6=60)

1. How do you identify and control for confounding variables in observational studies?
2. A sudden spike in diarrheal cases is reported in a district. Outline the steps of an outbreak Investigation.
3. Explain the concept of Telemedicine and digital health integration.
4. Explain the concept of PERT (Programme Evaluation and Review Technique) with suitable example.
5. Explain the concept of attack rates during outbreak investigation.
6. What are the commonly used treatment methods for biomedical waste in India?
7. How does poor sanitation contribute to the spread of waterborne diseases?
8. What are the key indicators used to assess nutritional status in a population?
9. Define high-risk pregnancy. List six high-risk conditions.
10. How does pre-placement and periodic examination help in disease prevention?
