

April-2001

[KD-183]

Sub. Code : 2087

B.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch XV — Community Medicine

Part I

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the strategies, targets, regimens and the current status of implementation of Global Tuberculosis Programme. (25)
 2. Discuss the present statutory requirements for the collection, storage and disposal of hospital refuse. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Sullivan's index
 - (b) Social classification for Indian communities
 - (c) Salient demographic features of Indian population
 - (d) Multiple logistic regression
 - (e) Genetic counselling.
-

March-2002

[KG 183]

Sub. Code : 2087

M.D. DEGREE EXAMINATION.

(All Regulations)

Community Medicine

Part I

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES

Time : Three hours, -Maximum : 100 marks

1. What is meant by nutritional surveillance?
Discuss in detail the strategy and implementation of
nutritional surveillance in India. (25)
 2. Explain the importance of social stratification and
discuss the various socioeconomic status scales available
in India. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Non parametric tests.
 - (b) Use of pictograms in health education.
 - (c) Communication barriers.
 - (d) Screening for AIDS.
 - (e) Multi-drug resistant tuberculosis.
-

September-2002

[KH 183]

Sub. Code : 2087

M.D. DEGREE EXAMINATION.

(Old/Revised Regulations)

Branch XV — Community Medicine

Part I

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe global epidemic of tuberculosis. Describe revised National tuberculosis control programme and principle of management used in tuberculosis control programme. (25)
 2. Discuss cultural factors in health and disease. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Genetics and Health
 - (b) Indicators of Health in the process of urbanization and industrialization
 - (c) Analysis of variance
 - (d) Radio active waste disposal
 - (e) Net reproduction rate.
-

April-2003

[KI 183]

Sub. Code : 2087

M.D. DEGREE EXAMINATION.

(Old/New/Revised Regulations)

Branch XV — Community Medicine

Part I

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Define family. Discuss the functions of the family which are relevant to health and disease. (25)
 2. Describe the sampling methods which are used in public health practice giving their relative merits and demerits. (25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Demographic transition
 - (b) Normal values in medicine
 - (c) Aetiology of Rheumatic fever
 - (d) Role of zinc in human nutrition
 - (e) Guidelines for safe drinking water.
-

[KJ 183]

Sub. Code : 2087

M.D. DEGREE EXAMINATION.

(Old/New/Revised Regulations)

Branch XV — Community Medicine

Part I

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES**

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
Forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the answer sheet provided as per the instructions on the first page of M.C.Q. Booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

Essays : (2 × 15 = 30)

1. Discuss the factors responsible for protein energy malnutrition. Write the preventive measures in detail.

2. Discuss the dynamics of epidemiological and technical failures for resurgence of Malaria. Outline the various measures to combat the issues.

3. Write short notes on : (10 × 5 = 50)

- (a) Indoor air pollution.
- (b) Assessment of Filariasis Control Programme.
- (c) Chandler's (Endemic) index.
- (d) Food toxicants.
- (e) Genetic counselling.
- (f) Theories of learning.
- (g) Census.
- (h) Scales used in measurement of variables.
- (i) Ethnic factors in health and diseases.
- (j) Fertility indicators.

[KL 183]

Sub. Code : 2087

M.D. DEGREE EXAMINATION.

(Old/New/Revised Regulations)

Branch XV — Community Medicine

Part I

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagram wherever necessary.

I. Write an essay on : (2 × 15 = 30)

(1) What is sampling? What are the different types of sampling technique? Describe any two methods with suitable examples.

(2) What is Environmental sanitation? Write briefly about swimming pool sanitation.

II. Write short notes on : (10 × 5 = 50)

(a) Characteristics of a Normal Curve.

(b) Evaluation of protein quality.

(c) Functions of Fever Treatment Depot (FTD)

Holder

(d) Criteria for Water Quality.

(e) Principles of arthropod control.

(f) Functions of family.

(g) Demographic cycle.

(h) Principle of health education.

(i) Balanced diet.

(j) Evolution of leprosy.

[KQ 158]

Sub. Code : 2086

M.D. DEGREE EXAMINATION.

Branch XV — Community Medicine

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES

Common to

Part I — All Regulations

(Candidates admitted from 1988-89 onwards
and

Paper I — (For candidates admitted from
2004-2005 onwards)

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Long Essay :

1. Describe the disposal of health waste in Globalised
India. (20)

2. Outline various National programmes for
population control in India. (15)

3. Outline a plan for detection of life-style diseases
in a Metro Politan City. How to bring public – private
partnership in management of Lifestyle diseases. (15)

II. Write Short notes on : (6 × 5 = 30)

(a) Clinical features of dengue.

(b) Investigating : A case of Food poisoning.

(c) Kyasnur forest disease.

(d) Behavioural sciences in Health.

(e) Sample size calculation.

(f) Research Methodology in health care
projects.

MARCH 2008

[KS 156]

Sub. Code : 2051

M.D. DEGREE EXAMINATION.

Branch XV — Community Medicine

TROPICAL MEDICINE AND PUBLIC HEALTH BASIC SCIENCES
IN COMMUNITY MEDICINE

Common to

Part I — Paper – I

(Candidates admitted upto 2003–07)

and

Paper I — (For candidates admitted from 2004–2005 onwards)

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Essay : (2 × 20 = 40)
1. Describe the sources, indicators, effects and preventive measures of Air Pollution.
 2. Describe the Preventive and Social measures of genetic disorders.
- II. Write short notes on : (10 × 6 = 60)
1. Cluster Sampling.
 2. Social Defense.
 3. Fly control measures.
 4. Activated sludge process.
 5. Food standards.
 6. Notification of diseases.
 7. Compare growth monitoring and nutritional surveillance.
 8. Sex ratio.
 9. Socio-economic status scale.
 10. Classification of protein-energy malnutrition.
-

September 2008

[KT 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

Branch XV – Community Medicine

**Paper I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

(For candidates admitted from 2004-2005 onwards)

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe in detail the sources of Health Information.
2. Discuss the role of family in Health and Disease.

II. Write short notes on :

(10 X 6 = 60)

1. Surveillance of drinking water quality.
 2. Indices of Thermal comfort.
 3. Antirodent measures.
 4. Classification of zoonoses.
 5. Population explosion.
 6. Erythroblastosis foetalis.
 7. Ecology of malnutrition.
 8. Fertility related statistics.
 9. Spectrum of Iodine deficiency disorders.
 10. Prudent diet.
-

March 2009

[KU 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

Branch XV – COMMUNITY MEDICINE
(Common to all candidates)

Paper I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : **(2 x 20 = 40)**

1. Health is multidimensional. Critically comment on this statement. Give a brief account of the changing concepts of health.
2. Discuss in detail the procedures adopted for different sampling methods.

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

1. Prevention and control of parasitic infections.
2. Standardized death rate.
3. Rehabilitation services for severely malnourished children in rural areas.
4. Disability adjusted life years (DALY).
5. Aflatoxins.
6. Minimum standards for slaughter houses.
7. Nutritional blindness.
8. Social engineering phase in public health.
9. Prevention and control of noise pollution.
10. Prevention of Food Adulteration Act (PFA – Act)

September 2009

[KV 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

Branch XV – COMMUNITY MEDICINE
(Common to all candidates)

Paper I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : (2 x 20 = 40)

1. Write about the differences between monitoring and surveillance giving suitable examples. Discuss the national disease surveillance programme.
2. Write about anthropology in public health and describe the role of socio-culture factors in health and disease.

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

1. Organizational behaviour.
2. National health account.
3. Write in brief about social paediatrics.
4. What is the role of correlation and regression coefficient in statistical analysis?
5. Write about consumer protection act in health care setting.
6. Define counselling, role of counseling in disease management.
7. Social rehabilitation.
8. Bacteriological analysis of water.
9. Physical quality of life index.
10. Notification of disease.

March 2010

[KW 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

Branch XV – COMMUNITY MEDICINE

**Paper – I – (for candidates admitted from 2004-05 to 2007-08) and
Part – I (for candidates admitted from 2008-09 onwards)**

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions : (2 x 20 = 40)

1. Describe various changing concepts in history of public health and add a note on medical and healthcare revolution that lead to progression in health today.
2. Outline a plan for detection of social problems in a metropolitan city. Mention the various strategies to be followed for their management.

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

1. Tests of significance.
2. Health education approach for a primitive society.
3. Investigation of an epidemic of meningococcal meningitis.
4. Avian influenza.
5. Brief about 'clinical horizon' and its significance in diseases control.
6. Randomised controlled trial design and types in epidemiology.
7. Vital statistics.
8. Iatrogenic infections.
9. Frequency polygon.
10. Sentinel surveillance.

September 2010

[KX 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

Branch XV – COMMUNITY MEDICINE

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

**Paper – I – (for candidates admitted from 2004-05 to 2007-08) and
Part – I (for candidates admitted from 2008-09 onwards)**

Q.P. Code : 202051

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Classify common arthropod borne diseases in India. Describe the modes of transmission of arthropod borne diseases. Discuss the principles of arthropod control.
2. What is Sampling? Discuss the sampling methods and their applications in Community Medicine.

II. Write short notes on :

(10 X 6 = 60)

1. Pulse polio immunisation.
2. Iodine deficiency disorders.
3. Urban malaria.
4. Bird Flu.
5. Health problems of computer professionals.
6. Population explosion.
7. Clinical Trials.
8. Soakage pit.
9. WHO water quality standards.
10. Fertility trends in India.

MAY 2011

[KY 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

| | Pages (Max.) | Time (Max.) | Marks (Max.) |
|---|-------------------------|------------------------|-------------------------|
| 1. Define Social Security. Discuss in detail the social security measures for industrial workers in India. | 11 | 35 | 15 |
| 2. Discuss in detail the epidemiology and prevention of Japanese encephalitis. Mention the epidemiological surveillance procedure in Japanese encephalitis. | 11 | 35 | 15 |

II. Write notes on :

| | | | |
|--|---|----|---|
| 1. Integrated Vector control for mosquitoes. | 4 | 10 | 7 |
| 2. Sample registration system. | 4 | 10 | 7 |
| 3. W.H.O. cluster sampling technique. | 4 | 10 | 7 |
| 4. Analysis of variance. | 4 | 10 | 7 |
| 5. Indices of thermal comfort. | 4 | 10 | 7 |
| 6. Social insurance and social assistance transmitted. | 4 | 10 | 7 |
| 7. Prevention and control of soil helminths. | 4 | 10 | 7 |
| 8. National nutrition policy. | 4 | 10 | 7 |
| 9. Demographic gap. | 4 | 10 | 7 |
| 10. Sanitation barrier. | 4 | 10 | 7 |

October 2011

[KZ 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages **Time** **Marks**
(Max.) **(Max.)** **(Max.)**

- | | | | |
|---|----|----|----|
| 1. Describe the family life cycle and family types. What are the functions of the family. | 11 | 35 | 15 |
| 2. Discuss the nutritional problems in public health. Elaborate the preventive measures. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Rural housing. | 4 | 10 | 7 |
| 2. Modern sewage treatment. | 4 | 10 | 7 |
| 3. Hydatid disease. | 4 | 10 | 7 |
| 4. Data presentation. | 4 | 10 | 7 |
| 5. Preplacement examination and notification. | 4 | 10 | 7 |
| 6. Fertility indicators. | 4 | 10 | 7 |
| 7. Hippocratic Oath. | 4 | 10 | 7 |
| 8. Preventive rehabilitation. | 4 | 10 | 7 |
| 9. Bionomics of malarial vector. | 4 | 10 | 7 |
| 10. Scabies. | 4 | 10 | 7 |

April 2012

[LA 156]

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code : 202051

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Discuss urbanization and its impact on health in the Indian context. | 16 | 35 | 15 |
| 2. Discuss with examples how the nutritional requirements can be met in quantity and quality by consuming a balanced diet. | 16 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Discuss control of mosquitoes causing filariasis. | 4 | 10 | 7 |
| 2. Epidemiology of MDR-TB (Multiple drugs resistant tuberculosis) | 4 | 10 | 7 |
| 3. Anti rabies vaccine. | 4 | 10 | 7 |
| 4. Acculturation – advantages and limitations. | 4 | 10 | 7 |
| 5. Discuss stages of “Behavior change communication”. | 4 | 10 | 7 |
| 6. Multiple linear regress- its application in epidemiology. | 4 | 10 | 7 |
| 7. Cluster sampling technique – Role in sampling. | 4 | 10 | 7 |
| 8. Explain General Fertility Rate and Total Fertility Rate as demographic indicators. | 4 | 10 | 7 |
| 9. Prevention of Food Adulteration Act – its implication. | 4 | 10 | 7 |
| 10. Strategy for control of anemia under RCH programme. | 4 | 10 | 7 |

[LB 156]

OCTOBER 2012
M.D. DEGREE EXAMINATION

Sub. Code: 2051

BRANCH XV – COMMUNITY MEDICINE

TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

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

- | | | | |
|---|----|----|----|
| 1. Classify adverse effects following Immunization. What are the adverse effects that may occur following BCG vaccination. How will you investigate a reported adverse effect after immunization. | 16 | 35 | 15 |
| 2. Give the steps for an epidemiological study to find out cause / risk factors for a newly reported syndrome. What are the possible sources of Bias in this study | 16 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Lot Quality analysis technique. | 4 | 10 | 7 |
| 2. Gender empowerment measure. | 4 | 10 | 7 |
| 3. Defence Mechanism of individual problems, difficulties, failures. | 4 | 10 | 7 |
| 4. Sanitary awakening. | 4 | 10 | 7 |
| 5. Risk approach in health care. | 4 | 10 | 7 |
| 6. Problem based learning in medical education. | 4 | 10 | 7 |
| 7. Counseling after HIV testing. | 4 | 10 | 7 |
| 8. Migration studies. | 4 | 10 | 7 |
| 9. Use of multiple screening tests in parallel or in series. | 4 | 10 | 7 |
| 10. Evidence Based Medicine in Medical Practice. | 4 | 10 | 7 |

(LC 156)

APRIL 2013

Sub. Code: 2051

BRANCH XV – COMMUNITY MEDICINE

**TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code : 202051

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Define elements of community based care for HIV/AIDS.
2. Define social stratification. Discuss the various methods used to stratify and the limitations of each .

II. Write notes on:

(10X7=70)

1. The Government initiatives for control of STD
2. Strategies for mosquito control under Urban Malaria scheme
3. Sociocultural factors influencing health care of post partum period
4. Discuss the various leadership patterns and their appropriate use
5. P Value in Statistics- the Rationale and significance of it.
6. Significance of Juvenile sex ratio
7. Quality adjusted Life years
8. Vitamin A deficiency
9. Health Impact of Global warming
10. Indicators of mental health in a community

[LD 156]

OCTOBER 2013

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code : 202051

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the epidemiology of hepatitis 'B' Add a note on Prevention and containment of hepatitis 'B'.
2. Discuss the various methods of health information system in detail.

II. Write notes on:

(10 x 7 = 70)

1. Types of sampling methods.
2. Standard Deviation.
3. Dependency Ratio.
4. Sources of Radiation exposure and modes of Radiation Protection.
5. Assumptions in ANOVA.
6. Effects of global warming.
7. Health Promotion for hook worm transmission prevention.
8. Antioxidant's role in Prevention. .
9. Association of social pediatrics, social obstetrics with preventive medicine.
10. Categorisation of Leprosy deformities.

[LI 156]

APRIL 2016

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code :202051

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. What is epidemiological triad? Describe in detail the natural history of disease.
2. Enumerate the criteria for diagnosis of rheumatic fever. Describe the prevention and control measures.

II. Write notes on:

(10 x 7 = 70)

1. Lay reporting.
2. Social rehabilitation.
3. Meta Analysis.
4. Primary prevention of Hook worm infestation.
5. Nalgonda Technique.
6. Control of fleas.
7. Communication barriers.
8. Tests of significance.
9. Swine flu.
10. Prevention and control of air pollution.

[LJ 156]

OCTOBER 2016

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code :202051

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the cultural factors in health and disease.
2. Discuss the social factors involved in the spread of Sexually Transmitted Diseases. Describe the preventive and control measures for these diseases.

II. Write notes on:

(10 x 7 = 70)

1. Characteristics of a Normal Curve.
2. Fluorosis.
3. Food standards.
4. Assessment of dietary intake.
5. Uses of health information system.
6. Gross Reproduction Rate and Net Reproduction Rate.
7. Genetic counselling.
8. Integrated Vector control.
9. Control of noise.
10. Composting.

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code :202051

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Explain the tertiary level of prevention. Define rehabilitation and describe the various types of rehabilitation with examples.
2. Describe the epidemiology of Filariasis and the prevention and control with a brief note on the relevant national programmes.

II. Write notes on:

(10 x 7 = 70)

1. Standardized mortality Ratio.
2. Rickettsial infections.
3. Measures of central tendency and their uses.
4. Biological transmission.
5. Diagrammatic representation of data.
6. Registration of vital events.
7. Endemic Index.
8. Diet Survey.
9. Bacteriological surveillance of water.
10. Group II insecticides.

[LL 156]

OCTOBER 2017

Sub. Code: 2051

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code :202051

Time : Three Hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe the epidemiology of the Japanese encephalitis. Write a note on its prevention and control.
2. Describe the process of purification of water on a large scale.

II. Write notes on:

(10 x 7 = 70)

1. Correlation and regression.
2. Statistical averages.
3. Role of family in health and disease.
4. Socioeconomic status scales.
5. Xerophthalmia.
6. Dietary fibre.
7. Population genetics.
8. Demographic cycle.
9. Record linkage.
10. Insecticide resistance.

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code :202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Explain how protein energy malnutrition can be detected at an early stage?
Discuss the measures for prevention of Protein-energy malnutrition in the community.
2. Explain the epidemiological determinants in tetanus.
Describe measures for prevention of tetanus.

II. Short notes:

(10 x 5 = 50)

1. Measures of dispersion.
2. Pulse polio immunization.
3. Biological control of arthropods.
4. Effects of noise exposure.
5. Radiation protection.
6. Mechanical Composting.
7. Genetic counselling.
8. Social security.
9. Sample Registration System.
10. Sex ratio.

III. Reasoning Out:

(4 x 5 = 20)

1. Explain the role of zinc supplements given during a episode of acute diarrhea in children.
2. Explain the supplementary action of proteins.
3. Explain the link between social stress and disease.
4. Give reasons as to why chlorination is a preferred method of disinfection of drinking water on a large scale?

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay: **(2 x 15 = 30)**

1. What is acculturation?
Discuss the cultural factors in health and disease.
2. Explain the epidemiological determinants in poliomyelitis.
Add a note on acute flaccid paralysis surveillance.

II. Short notes: **(10 x 5 = 50)**

1. Standard normal curve.
2. Epidemic dropsy.
3. Prevention of iodine deficiency disorders.
4. Age pyramid.
5. Disease registers.
6. Host factors in malaria.
7. Eugenics.
8. Integrated vector control.
9. Indoor air pollution.
10. Oxidation pond.

III. Reasoning Out: **(4 x 5 = 20)**

1. Why coliform organisms are chosen as indicators of faecal pollution rather than the water-borne pathogens directly?
2. Tuberculosis is a social disease with medical aspects. Explain this statement.
3. Explain how kala-azar is related to socio economic status?
4. Explain how contact tracing and cluster testing are useful in control of sexually transmitted diseases?

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. List the diseases that are transmitted by Aedes mosquitoes. Discuss the control measures with reference to the breeding and biting habits of Aedes mosquitoes.
2. Describe the epidemiology of leprosy. List the measures to prevent disability among people affected with leprosy.

II. Short notes:

(10 x 5 = 50)

1. Sources of information for mortality and morbidity in India and their limitations.
2. Knowledge on natural history of diseases and its relevance in public health.
3. Tests for statistical significance with discrete data.
4. Confidence interval.
5. Epidemiology of rubella and control measures.
6. Management of drug resistant Tuberculosis.
7. List the soil-transmitted helminthic infections and the strategies for prevention.
8. Epidemiology of Scrub Typhus and control measures.
9. List the common waterborne diseases and discuss the control measures.
10. Describe the general principles guiding the introduction of screening programmes in a community.

III. Reasoning Out:

(4 x 5 = 20)

1. Differentiate between descriptive statistical methods and inferential statistical methods.
2. Explain 'Skewed and normal distribution of data' with relevant examples.
3. Relevance of herd immunity in vaccination programmes.
4. Discuss the relevance of social and cultural epidemiology in health and diseases of children.

M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE
PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss the pre-planning and planning for a study to identify association between 'time spent at information technology gadgets' and 'stress levels'.
2. Discuss the liaising officers you would coordinate for inter sectoral coordination in a town which has insanitary conditions with water stagnation, street food vendors contributing to ill health?

II. Short notes:

(10 x 5 = 50)

1. Discuss the different concepts and definitions of health and its implication in providing healthcare.
2. Levels of prevention that can be applied for control of 'Alcoholism'.
3. What is Family of International Classification FIC? Discuss special features of the International Classification of Function.
4. Factors affecting bioavailability of iron in food.
5. Plan a one-day diet for a lactating mother as per the ICMR guidelines based on food portions.
6. Discuss natural history of hypertension giving the probability of various outcomes.
7. Measures for control of zoonotic disease transmission.
8. Steps to be followed in early detection of an epidemic of influenza and its control.
9. Discuss the methods of 'triangulation' and its role in research.
10. Discuss various analytical methods you can apply to data collected from a cross sectional study to make inference.

III. Reasoning Out:

(4 x 5 = 20)

1. What is an epidemic curve? Discuss its various uses.
2. Enlist the parameters required for estimating sample size and justify their role in the quality of research.
3. Compare and contrast 'Risk' presented as 'Incidence' in terms of person-years and 'Hazard rate' through survival analysis.
4. Compare and contrast 'disinfection' and 'disinsection' in control of disease transmission.

[LQ 156]

AUGUST 2020
(MAY 2020 SESSION)

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Describe the evolution of various theoretical models that explain the causation of human diseases.
2. Discuss the problem of hidden hunger in India and describe the measures to tackle the same.

II. Short notes:

(10 x 5 = 50)

1. Standardized Mortality Ratio
2. Explain 'Social assistance' and 'social insurance'
3. What is Baye's theorem? Discuss its application in screening.
4. Poison distribution
5. External validity
6. Epidemic Diseases Act
7. Vector resistance and Refractory Behaviour
8. Neglected Tropical Diseases
9. National Disaster Management Authority
10. 30 * 7 EPI cluster sampling technique

III. Reasoning Out:

(4 x 5 = 20)

1. Epidemiology helps in health care management.
2. Community Diagnosis – necessary or not?
3. Effect of open vial policy in UIP.
4. Disaster preparedness Vs Disaster mitigation

[LS 156]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. What is meant by hierarchy of evidence in relation to epidemiological studies?
Explain the Bradford Hill criteria for judging causality of disease with examples.
2. As a Health Planner, how will you Plan and investigate an epidemic of Dengue fever in a community?

II. Short notes:

(10 x 5 = 50)

1. Null Hypothesis
2. Disability rates.
3. Surveillance of drinking water quality
4. Lot quality Assurance Sampling
5. Nutrition Rehabilitation Centre
6. E waste Management.
7. Swachh Bharat Mission Gramin
8. Methods of water conservation
9. Non randomized trials
10. PoshanAbhiyan

III. Reasoning Out:

(4 x 5 = 20)

1. Monitoring vs Surveillance
2. Killed vaccines vs Live vaccines
3. Design effect in sampling.
4. Weighment of raw foods is an accurate dietary assessment method than oral questionnaire method. Justify.

[MD 0721]

JULY 2021
(MAY 2021 SESSION)

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Write briefly on sampling techniques. Describe the commonly used sampling technique to evaluate the immunization status of children below five years of age in a district?
2. Describe with suitable examples the various public health measures to break the 'chain of transmission of infections'.

II. Short notes:

(10 x 5 = 50)

1. Write briefly on Vitamin A deficiency status in children. List the interventions to prevent Vitamin A deficiency in children.
2. Write briefly on public health 'emergency preparedness and response' to an attack of bioterrorism.
3. Write briefly on how 'selection bias' can affect study inferences. List the methods used to minimize it.
4. Describe the biases in cross sectional studies.
5. Discuss the effect of 'lead time bias' on survival duration when screening for a disease.
6. Discuss the ethical issues in research among vulnerable groups of people and the measures to overcome the same.
7. Write briefly on food fortification.
8. Explain the procedure for testing hypothesis on difference between two population proportions.
9. Write briefly on qualitative studies and list its limitation.
10. Explain the characteristics of diseases which are appropriate for mass screening?

III. Reasoning Out:

(4 x 5 = 20)

1. Discuss the measures to be taken in research involving human participants in order to maintain 'anonymity and confidentiality'.
2. Explain the differences between 'correlation' and 'causal association'.
3. Explain the differences between 'parallel trials' and 'cross-over trials'.
4. The basic reproduction number (R0) of COVID-19 is between 2 and 2.5. Interpret this and discuss its relevance in control measures.

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

[MD 0522]

MAY 2022

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay:

(2 x 15 = 30)

1. Explain how natural history of a given disease is identified with an example? Give its usefulness.
2. Discuss distribution of fats in the human body, its measurement and factors affecting body fat.

II. Short notes:

(10 x 5 = 50)

1. Explain concept of “Web of causation” and its importance in disease control, with an example.
2. What are the uses of describing a disease/health related event in terms of “time”?
3. Discuss “Routine reports” from health institutions as a source of epidemiologic data, their uses and limitations.
4. Explain the various terms used in evaluating a diagnostic test.
5. Methods for control of transmission of infection by blood and body fluids.
6. How can BIAS be detected in a “Randomised Control study”?
7. Role of computers and software in planning, implementation, analysis & presentation of epidemiological research.
8. Sensitivity Analysis.
9. What factors determine the sample size for a research?
10. Quality control measures under ICDS scheme.

III. Reasoning Out:

(4 x 5 = 20)

1. Compare QALY & DALY.
2. Give a choice of 4 foods with quantity for providing recommended daily allowance of Vitamin A.
3. Compare Stratified Sampling with Cluster Sampling.
4. Describe the pictograms used for presenting data.

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

[MD 1022]

OCTOBER 2022

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay: (2 x 15 = 30)

1. Health is multidimensional, critically comment and discuss in detail about various theories of disease causation.
2. A school health survey done in urban slums of a district X has revealed iron deficiency anemia as severe public health problem among adolescent girls. As a block medical officer.
 - a) Plan an intervention program with community participation component to address anemia among adolescents in your block.
 - b) Enlist programs and schemes in plan to combat anemia and explain how would you incorporate in your action plan for your service area?

II. Short notes: (10 x 5 = 50)

1. E waste management.
2. Meta analysis.
3. Disaster planning and management.
4. Mental health gap.
5. Surveillance of NCD.
6. Community participation in achieving SDG.
7. Discuss challenges in vector control measures.
8. Triple Burden of Disease.
9. Tests of Significance.
10. Prevention of Air pollution.

III. Reasoning Out: (4 x 5 = 20)

1. Quantitative vs Qualitative research.
2. Effect Modifier vs Confounder.
3. Skewness vs Kurtosis in Gaussian Curve.
4. Population screening vs High Risk Screening.

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

[MD 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2051

M.D. DEGREE EXAMINATION

BRANCH XV – COMMUNITY MEDICINE

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay: (2 x 15 = 30)

1. Discuss the challenges in measurement of “Health” in research. Explain how you would collect information, for measuring “Disability” among elderly in a given District.
2. Explain the indicators used for describing mortality profile of a region. How would you statistically compare the mortality profile of two districts?

II. Short notes: (10 x 5 = 50)

1. Explain the Growth and Development of Public Health delivery in India across Centuries.
2. Enlist diseases transmitted by direct contact and discuss its prevention.
3. You wish to study the association of presence of fast-food outlets with diabetes control in a given Community. Give a brief outline of the study design you would choose with its advantages and limitations.
4. Briefly describe how “agreement” is measured in Statistics.
5. Describe “Social Network Analysis” as a Qualitative Research Tool for Public Health interventions.
6. How is burden of Malaria assessed in a Community?
7. Discuss briefly the change in Screening Guideline for Breast Cancer as per NPCDCS.
8. Discuss sustainable solutions for Dengue control.
9. Discuss the utility and limitation of the commonly available statistical software for analysis of Health Research.
10. Discuss the utility, limitations and assumptions in Cluster sampling.

III. Reasoning Out: (4 x 5 = 20)

1. Compare and Contrast Relative Risk and Hazards Ratio.
2. A screening test requires high sensitivity but a diagnostic test requires high specificity. Explain.
3. Discuss the goals and objectives of the specialty “Community Medicine” as per the NMC along with required skill matrix.
4. Mass Drug Administration for Filariasis control. Analyse the underlying principle.

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

[MD 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 2051

**M.D. DEGREE EXAMINATION
BRANCH XV – COMMUNITY MEDICINE**

**PAPER I – TROPICAL MEDICINE AND PUBLIC HEALTH
BASIC SCIENCES IN COMMUNITY MEDICINE**

Q.P. Code: 202051

Time : Three Hours

Maximum : 100 Marks

I. Essay: (2 x 15 = 30)

1. Describe the study designs for Qualitative research? What are the tools that can be used for qualitative studies? List the various software available for Analysing Qualitative Data.
2. Describe the steps in conducting Meta-Analysis and sources of bias in Meta - Analysis. How is Heterogeneity between studies addressed during analysis?

II. Short notes: (10 x 5 = 50)

1. Basic reproduction number and the factors influencing it.
2. How is Stem cell Research regulated? Discuss the importance for its regulations.
3. Discuss applications of Lot Quality Assurance Sampling in health survey.
4. Randomization- Types and its advantages.
5. Validation of questionnaire.
6. What is Primordial prevention? Describe interventions under Primordial prevention for Obesity Epidemic in India.
7. Nested case-control study Vs Case Cohort study.
8. Intention to treat analysis Vs Per protocol analysis.
9. Quarantine Vs Isolation with suitable examples.
10. What is food adulteration? How do you educate community to identify adulterants in common food items consumed by them?

III. Reasoning Out: (4 x 5 = 20)

1. Confounding is not a bias –Justify the statement
2. P value does not provide a good measure of evidence –Justify the statement.
3. Evidence based medicine is valued higher than Meta analysis –Justify.
4. Why Low-Carb diet approach produce rapid weight loss compared to other dietary approach?
