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

**[MD 0524]** **MAY 2024** **Sub. Code: 4037**

**M.D. DEGREE EXAMINATION**

**BRANCH XV – COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. Write in detail on Epidemiology of Cervical Cancer in India. Describe the Primary and Secondary Prevention of the same.

2. Discuss in detail on Arthropod Borne Diseases including Vectors causing diseases, transmission and underlying principles of arthropod control.

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

1. Define Hospital Acquired Infection. Discuss the Sources, Routes of spread and Prevention of the same.
2. Discuss the Social Engineering Phase in Public Health.
3. Explain the differences between Disease Control, Elimination and Eradication with suitable examples.
4. What is premunition and its importance.
5. Essential Ethical Principles in doing Research on Human Subjects.
6. Marginal Analysis.
7. Discuss the Role of Socio-cultural Factors in Disease Causation.
8. How ROC is drawn in right situations and discuss its utility.
9. Explain Spurious Association. How will you manage this association during research studies?
10. Describe the various indicators of Health.

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

1. Discuss the Reasons of Increasing Resistance to Antibiotics and describe the strategies to reduce it.
2. What are Life Style Diseases and elaborate it with suitable example.
3. People's health should be the concern of the people themselves – Comment.
4. Discuss the role of Travel and Tourism in disease Occurrence.

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

**[MD 1224] DECEMBER 2024 Sub. Code: 4037**

**(OCTOBER 2024 EXAM SESSION)**

**M.D. DEGREE EXAMINATION**

**COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. As a district health officer, you are tasked with addressing rising rates of adolescent obesity in your community. What strategies would you develop to engage adolescents and their families to promote healthier lifestyle choices and also assess the effectiveness of your intervention in reducing adolescent obesity?

2. What are Epidemic prone diseases? Medical officer of a PHC reports jaundice outbreak in a Village. As a district epidemiologist, how will you investigate? Discuss the appropriate control measures to prevent the transmission of disease in the community.

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

1. Differentiate Effect Modifiers and Confounders in health research with suitable examples.
2. Describe ecological fallacy.
3. Prevention Paradox.
4. Discuss the public health response measures implemented during Nipah virus outbreak.
5. Explain WHO 1+1 initiative.
6. Discuss the reporting standard for systematic review.
7. Omran and Olshansky's theory of epidemiological transition.
8. Discuss various Coping strategies for mental stress.
9. ANCOVA test of significance.
10. Role of molecular epidemiology in control of malaria.

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

1. Rational behind 'test and treat policy' in HIV.
2. Population screening versus opportunistic screening in non-communicable diseases.
3. Polio eradication from India has been achieved. Analyze the reasons.
4. How Clinical trial registry in India plays a role in improving transparency and accountability of clinical research?

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

**[MD 0525]** **MAY 2025** **Sub. Code: 4037**

**M.D. DEGREE EXAMINATION**

**COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. Discuss Objectives, strategy, implementation, package of Services under NACP-Phase-V. Critically appraise the Programme.
2. How to estimate the strength of association for establishing relationship. Discuss the criteria for judging causation of disease.

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

1. WHO Frame work convention of Tobacco control.
2. Hazard analysis and critical control points in Hospital infection control.
3. National Cancer Registry.
4. Methods of Triangulation and role in Research.
5. Types of Randomized control trial.
6. Global Polio eradication initiative and salient features of Polio End game strategy.
7. Ottawa Charter for Health Promotions.
8. Yield in screening test.
9. Rapid Response Team.
10. National strategic plan – Malaria Elimination – 2023-27.

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

1. Differentiate QALY and DALY as measurement of health.
2. Confounder and effect modifier in Epidemiological studies.
3. TB is a social disease with medical aspects.
4. Contact tracing and cluster testing are useful in control of STI.

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**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY**

**[MD 1025]** **OCTOBER 2025** **Sub. Code: 4037**

**M.D. DEGREE EXAMINATION**

**COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. List out the neglected tropical diseases identified by WHO and explain its public health importance. Discuss the objectives, prevention and control strategies of Rabies under One Health Program.

2. As a health researcher, you are planning to do health research among college students using questionnaire as the only data collecting tool. Discuss various components that you will consider while designing the questionnaire and the methods you will apply to test reliability and validity of a questionnaire.

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

1. Discuss stem and leaf plot with suitable diagram.
2. Discuss in detail about systemic errors in epidemiological studies.
3. Discuss the various indicators used for elimination of Mother to child transmission of HIV and syphilis.
4. Screening for common cancers in Indian context through Makkali Thedi Maruthuvam Programme.
5. Discuss the importance and usage of non-parametric test in medical statistics.
6. Describe life tables and their applications.
7. Role of interferon Gamma release assay in tuberculosis.
8. Adult immunization and its importance.
9. Discuss on epidemiology of Chandipura virus.
10. Discuss on Fit India movement including age-appropriate fitness protocols and guidelines.

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

1. Write concept of undetected = untransmittable in context to HIV.
2. Bird Flu has emerged as Pandemic -Give your comments.
3. Utility and limitations of various lab procedures commonly employed in the diagnosis of viral diseases.
4. Epidemiological transition and disease profile in our country over next 25years- Discuss.

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**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY**

**[MD 0526]** **MAY 2026** **Sub. Code: 4037**

**M.D. DEGREE EXAMINATION**

**COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. Define AEFI. Explain the Categorisation of AEFI with examples. Write in brief about AEFI investigation and management in India.

2. Describe the objective, strategy, implementation, services under National TB Elimination Programme, Critically Appraise the Programme.

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

1. Explain Hawthrone effect. Suggest ways to minimize it.
2. Define standard error and its application in test of significance.
3. India Hypertension control initiative.
4. Uses of Regression in Public health.
5. Impact indicators for monitoring HIV control.
6. Disability rates with examples.
7. Ecological fallacy.
8. Anti Typhoid vaccines.
9. Factors influencing emergence and reemergence of infectious diseases.
10. Salient features of National Oral Health Programme in India.

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

1. Effect of Ring immunization in Herd immunity.
2. Concept behind Birth dose vaccine.
3. Principle behind MDA for filariasis control.
4. Role of sample size calculation in quality of research.

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**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY**

**[MD 0926] SEPTEMBER 2026 Sub. Code: 4037**

**M.D. DEGREE EXAMINATION**

**COMMUNITY MEDICINE**

**PAPER I – CONCEPTUAL (AND APPLIED) UNDERSTANDING OF PUBLIC HEALTH, COMMUNITY MEDICINE, COMMUNICABLE AND NON-COMMUNICABLE DISEASES, EMERGING AND RE-EMERGING DISEASES, APPLIED EPIDEMIOLOGY, HEALTH RESEARCH, BIO-STATISTICS**

***Q.P. Code: 204037***

**Time : Three Hours** **Maximum : 100 Marks**

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

1. Discuss the milestones in achieving the current status of leprosy in India. What are the various strategies adopted towards achieving a Leprosy Free India? Add a note on Community Based Rehabilitation in leprosy.

2. A researcher wanted to find out the potential long-term consequences on the use of oral contraceptives among females in a city. Which will be the most suitable study design and why? Describe the steps in conducting the study. How will you measure the strength of the association? How does this study differ from nested case control study?

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

1. Metropolitan Surveillance Units.
2. Adult vaccinations.
3. District Mental Health Programme.
4. A new screening test has been developed for outpatient identification of Urinary Tract Infection in women. How do you assess the validity of the test?
5. Control of Sexually Transmitted Infections.
6. Systematic review.
7. Standardized Mortality Rate.
8. The Multiple Risk Factor Intervention Trial (MRFIT).
9. Primary prevention of filariasis.
10. Blinding vs Allocation concealment.

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

1. Primordial prevention is preferred than other levels of prevention for the control of non-communicable diseases. Justify.
2. TT has been replaced with Td. Give reasons.
3. 'Surveillance and containment' played a crucial role in the successful eradication of smallpox – Comment.
4. OPV given on the day of birth is called Zero dose. Give reasons.

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