[KD 236]   **APRIL 2001**

M.Sc. (Epidemiology) DEGREE EXAMINATION.

Part I

Paper III — EPIDEMIOLOGY METHODS IN HEALTH
MANAGEMENT

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

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) Sullivans 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.

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2001

Year	Paper_Subject	Subject_Code	Part_Section
2001	Paper-III- Epidemiological methods in health		I

1. Define health education. Describe the various methods of health education. Discuss their merits and demerits. (20)

2. Write briefly on: (30)

   a. Planning cycle

   b. Cost-benefit analysis

   c. Barriers in communication

   d. Advantages of joint family system

3. Define maternal mortality rate. Write in detail the various causes for high maternal mortality rate in Inida and describe the Government effort to reduce it. (20)

[KI 236]   **Sub. Code : 3003**

M.Sc. (Epidemiology) DEGREE EXAMINATION.

Part I

Paper III — EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

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.

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[KK 236]   **Sub. Code : 3003**

M.Sc. (Epidemiology) DEGREE EXAMINATION.

Part I

Paper III — EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT

Time : Three hours   Maximum : 100 marks

Sec. A & B : Two hours and   Sec. A & B : 80 marks
          forty minutes

Section C : Twenty minutes   Section C : 20 marks

Answer Sections A and B in the **SAME** Answer Book.

Answer Section C in the answer sheet provided.

SECTION A

1.   Describe the procedure in conducting a RCT.
(Randomized Control Trial) selecting a suitable
example.   (15)

2.   What is bias? Describe the various types of bias in
epidemiological studies and measures to tackle them.
                                                (15)

SECTION B

3.   Write short notes on : $(10 \times 5 = 50)$

   (a)   Odd's ratio

   (b)   Confounding

   (c)   Ecological studies

   (d)   Etiologic fraction

   (e)   Sensitivity analysis

   (f)   Cost-benefit analysis

   (g)   Prevention of air pollution

   (h)   Uses of life table

   (i)   Age specific death rates

   (j)   Net reproduction rate.

2   **[KK 236]**

AUGUST 2005

[KN 236]　　　　　　　　**Sub. Code : 3003**

M.Sc. (Epidemiology) DEGREE EXAMINATION.

Part I

Paper III — EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT

Time : Three hours　　　　　Maximum : 100 marks

Sec. A & B : Two hours and　　Sec. A & B : 80 marks
　　　　　　forty minutes

Sec. C : Twenty minutes　　　Sec. C : 20 marks

Answer Sections A and B in the **SAME** answer book.

Answer Section C in the answer sheet provided.

Answer ALL questions.

SECTION A — (2 × 15 = 30 marks)

1. Describe the procedure in conducting a case-control study selecting a suitable example. (15)

2. Describe the role of sample size and power consideration in research studies. (15)

SECTION B — (10 × 5 = 50 marks)

3. Write short notes on :

(a) Attributable risk.

(b) Attrition.

(c) Double blinding.

(d) Time cluster studies.

(e) Decision tree.

(f) Cost-effectiveness analysis.

(g) Prevention of environmental pollution.

(h) Census.

(i) Standardised death rate.

(j) Factors affecting demographic profile.

2　　　　　　　　　　**[KN 236]**

[KS 236]　　　　　　　　**Sub. Code : 3003**

M.Sc. (Epidemiology) DEGREE EXAMINATION.

Part I

Paper III — EPIDEMIOLOGICAL METHODS IN
HEALTH MANAGEMENT

Q.P. Code :313003

Time : Three hours　　　　　Maximum : 100 marks

Answer ALL questions.

I.　Essays :　　　　　　　　　(2 × 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 short notes on :　　　　(10 × 6 = 60)

1.　Developmental 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.

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M.Sc (EPIDEMIOLOGY) DEGREE EXAMINATION

Part I
Paper III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code : 313003

Time : Three hours **Maximum : 100 marks**

Answer All questions.

I. Essays: **(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 Short Notes on : **(10X 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 in randomization.

10. Parallel screening tests.

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[KV 236]   Sub. Code: 3003

M.Sc (EPIDEMIOLOGY) DEGREE EXAMINATION

Part I
Paper III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code : 313003

Time : Three hours   **Maximum : 100 marks**

Answer All questions.

I. Essays: (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 Short Notes on :   (10X 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.

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MAY 2011

[KY 236]   **Sub. Code: 3003**

M.Sc. (EPIDEMIOLOGY) DEGREE EXAMINATION.

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 quantity 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".

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[KZ 1011]   **Sub. Code: 3003**

M.Sc EPIDEMIOLOGY DEGREE EXAMINATION

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT

Q.P. Code : 313003

Time : 3 hours   **Maximum : 100 marks**
         (180 Min)

Answer ALL questions in the same order.

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	20
2. How will you estimate the fertility of a region?	17	40	20

II. Write notes on :

1. Describe the variables required to study the spectrum of disease of Vitamin A deficiency.	4	10	6
2. Advantages and limitations of using parallel and serial screening tests.	4	10	6
3. Discuss confounding effect in a study and methods to overcome this.	4	10	6
4. Advantages and limitations of nested case control study.	4	10	6
5. In a study on efficacy of "Coaching class" in scoring marks discuss the need for comparison group.	4	10	6
6. Differentiate screening and case finding under the Revised National Tuberculosis Control Programme.	4	10	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	6
8. How can sampling error be estimated?	4	10	6
9. Dependency ratio – its implications.	4	10	6
10. Cost utility analysis of "Quarterly family picnic programme" in improving work output.	4	10	6

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M.Sc EPIDEMIOLOGY DEGREE EXAMINATION-MAY 2012

PAPER III – EPIDEMIOLOGICAL METHODS IN HEALTH MANAGEMENT
Q.P. Code: 313003

Time: 3 hours   **Maximum: 100 marks**
    (180 Min)

Answer ALL questions in the same order.

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	20
2. How will you estimate the fertility of a region?	17	40	20

II. Write notes on:

	Pages (Max)	Time (Max)	Marks (Max)
1. Describe the variables required to study the spectrum of disease of Vitamin A deficiency.	4	10	6
2. Advantages and limitations of using parallel and serial screening tests.	4	10	6
3. Discuss confounding effect in a study and methods to overcome this.	4	10	6
4. Advantages and limitations of nested case control study.	4	10	6
5. In a study on efficacy of "Coaching class" in scoring marks discuss the need for comparison group.	4	10	6
6. Differentiate screening and case finding under the Revised National Tuberculosis Control Programme.	4	10	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	6
8. How can sampling error be estimated?	4	10	6
9. Dependency ratio – its implications.	4	10	6
10. Cost utility analysis of "Quarterly family picnic programme" in improving work output.	4	10	6

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M.Sc EPIDEMIOLOGY DEGREE EXAMINATION
PAPER III – EPIDEMIOLOGICAL METHODS
IN HEALTH MANAGEMENT
Q.P. Code : 313003

Time : 3 hours   **Maximum : 100 marks**
       (180 Min)

Answer ALL questions in the same order.

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	20
2. Classify Epidemiological studies? Explain in detail the design and steps in conducting a Randomized controlled trial?	17	40	20

II. Write Notes on :

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

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M.Sc EPIDEMIOLOGY DEGREE EXAMINATION
PAPER III – EPIDEMIOLOGICAL METHODS
IN HEALTH MANAGEMENT
Q.P. Code : 313003

Time : 3 hours   **Maximum : 100 marks**

I. Elaborate on: **(2x20=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 date 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 :   **(10X6=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.

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M.Sc EPIDEMIOLOGY DEGREE EXAMINATION
PAPER III – EPIDEMIOLOGICAL METHODS
IN HEALTH MANAGEMENT
Q.P. Code : 313003

Time : 3 hours   **Maximum : 100 marks**
Answer ALL questions

I. Elaborate on :   **(2X20=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 and 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 :   **(10X6=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.

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