

MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE
EXAMINATION – MAY/JUNE 2016****SUBJECT: ENH – 606: ENVIRONMENTAL AND OCCUPATIONAL TOXICOLOGY
(SPECIALIZATION: ENVIRONMENTAL AND OCCUPATIONAL HEALTH)**

Wednesday, June 01, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✍ Long Essays:

1. Define toxicology. Mention the different route of exposure to various toxicants.
2. Enumerate the various food chemopreventives. State their significance.
3. Describe the different cold related health hazards. How we can prevent such hazards?
4. Write a protocol for the ergonomic evaluation of a workplace.

(10 marks × 4 = 40 marks)

5. Short notes:

- 5A. Toxic Oil Syndrome
- 5B. Minamata disease
- 5C. Hypothermia
- 5D. Biomagnification
- 5E. Health concerns of genetically engineered foods
- 5F. Wilson's principles

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY

SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE EXAMINATION – MAY/JUNE 2016

SUBJECT: MCH – 606: SCOPE AND OBJECTIVES OF MATERNAL AND CHILD HEALTH
(SPECIALIZATION: MATERNAL AND CHILD HEALTH)

Wednesday, June 01, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

☞ Long Answer Questions:

1. What is the significance of adolescent health? What are the priorities under adolescent health? Explain
2. Explain in detail the fertility related indicators.
3. Explain briefly about the community nutrition programmes.
4. What are the components of antenatal care? Explain

(10 marks × 4 = 40 marks)

5. Write Short notes on:

- 5A. WIFS
- 5B. Maternal Mortality Ratio
- 5C. Significance of growth chart
- 5D. Baby Friendly Hospital Initiative
- 5E. Types of IUCD
- 5F. BCG

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE
EXAMINATION – MAY/JUNE 2016****SUBJECT: MPH – 606: ADVANCED EPIDEMIOLOGY AND SURVEILLANCE
(SPECIALIZATION: EPIDEMIOLOGY)**

Wednesday, June 01, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✍ Long answer questions:

1. What are different types of bias occurring in epidemiological research? Explain selection bias with an appropriate example.
2. Explain different factors influencing prevalence of disease with appropriate example.
3. What is meant by Differential & Non differential Misclassification in epidemiology? Explain it with an appropriate example.
4. Design a randomized controlled trial to test the efficacy of new antihypertensive drug.

(10 marks × 4 = 40 marks)

5. Short answer questions:

- 5A. Systematic
- 5B. Odds ratio
- 5C. Necessary cause
- 5D. Hill's Criteria for Causation in Epidemiology
- 5E. AFP surveillance system performance indicators
- 5F. H.I.V. sentinel surveillance

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY

SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE EXAMINATION – MAY/JUNE 2016

**SUBJECT: ENH – 608: ENVIRONMENTAL AND OCCUPATIONAL EPIDEMIOLOGY
(SPECIALIZATION: ENVIRONMENTAL AND OCCUPATIONAL HEALTH)**

Thursday, June 02, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✍ Long answer questions:

1. Design a case control study to test association between benzene and skin cancer.
2. What are the different types of bias occurring in case control study? Explain any one of them with appropriate example.
3. What is meant by effect modification in epidemiological research? Explain it with an appropriate example.
4. Explain the concept of matching with an appropriate example. Discuss briefly the advantages of matching.

(10 marks × 4 = 40 marks)

5. Write short notes on:

- 5A. Systematic review
- 5B. Relative risk
- 5C. Information bias
- 5D. Causal inference
- 5E. Active surveillance
- 5F. Monitoring of surveillance quality

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH
DEGREE EXAMINATION – MAY/JUNE 2016****SUBJECT: MCH – 608: EPIDEMIOLOGY IN MATERNAL AND CHILD HEALTH
(SPECIALIZATION: MATERNAL AND CHILD HEALTH)**

Thursday, June 02, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✍ Long answer questions:

1. What is meant by incidence density? Write the differences between incidence density and prevalence.
2. What does the concept of bias mean in epidemiology? Explain stratified analysis with an example.
3. Briefly discuss the absolute measures of association in epidemiology. Illustrate the calculation of population attributable risk with an appropriate example.
4. Design a cohort study to test association between hormone replacement therapy for menopausal women and cardiovascular disease.

(10 marks × 4 = 40 marks)

5. Write Short notes on:

- 5A. Cumulative incidence
- 5B. Systematic review
- 5C. Berksons bias
- 5D. Web of causation
- 5E. Disease elimination
- 5F. Outbreak response immunisation

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE
EXAMINATION – MAY/JUNE 2016****SUBJECT: MPH – 608: HEALTH ECONOMICS
(SPECIALIZATION: EPIDEMIOLOGY)**

Thursday, June 02, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

Write long essays on:

1. What is meant by economy? What are the economic problems does the health sector encounter. In what ways the demand for health care is different from the demand for other goods?
2. Public Private Partnership seems to a good way to extend the range of health care services. Discuss the prerequisite conditions necessary to enter into this partnership. Explain the different models of PPP giving suitable examples.
3. Enumerate the equilibrium of supply and demand along with the graph. Discuss the conditions responsible for the market to not to be in equilibrium along with the diagram. What are the three steps to analyzing changes in equilibrium?
4. Explain supply of labour along with supply curve. Under what condition does the supply curve slope upwards and also downwards? Explain what causes the labour supply curve to shift.

(10 marks × 4 = 40 marks)

5. Write short notes on:

- 5A. List out and explain the four determinants of price elasticity of demand.
- 5B. Discuss the concept of efficiency in economic evaluation. What are the different steps/stages of economic evaluation?
- 5C. What do you understand by insurance? Explain the concept of health insurance and list out the advantages and disadvantages of health insurance.
- 5D. Discuss the value of marginal product and the demand for labour. What causes the labour demand to shift?
- 5E. Explain the concept of efficiency and equity in relation to healthcare sector.
- 5F. Health is wealth. Improved health contributes to the economic growth in many ways. Justify this statement.

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE
EXAMINATION – MAY/JUNE 2016**

**SUBJECT: MCH – 610: ISSUES IN MATERNAL AND CHILD HEALTH INCLUDING INFECTIOUS DISEASES
(SPECIALIZATION: MATERNAL AND CHILD HEALTH)**

Friday, June 03, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✍ **Long answer questions:**

1. What is AFP surveillance? Add a note on the vaccines available for poliomyelitis.
2. Write a short essay on the various antitubercular drugs.
3. Discuss the various markers for Hepatitis B infection. Add a note on Hepatitis B vaccine.
4. Write a detailed note on the objectives and methodology of HIV sentinel surveillance.
(10 marks × 4 = 40 marks)

5. **Write short notes on:**

- 5A. Measures to protect susceptible host
- 5B. Pandemic
- 5C. Reservoir of Infection
- 5D. Antigenic drift
- 5E. Epidemiological parameters for Malaria
- 5F. Vector for Dengue Infection

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY**SECOND SEMESTER MASTER OF PUBLIC HEALTH
DEGREE EXAMINATION – MAY/JUNE 2016****SUBJECT: MPH – 610: INFECTIOUS DISEASE EPIDEMIOLOGY
(SPECIALIZATION: EPIDEMIOLOGY)**

Friday, June 03, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

☞ Long answer questions:

1. Describe the epidemiology of Chikungunya infection along with its preventive and control measures.
2. Describe the epidemiology of dengue infection along with its preventive and control measures.
3. What is the difference between reservoir of infection and source of infection? Discuss the various measures to control reservoir of infection.
4. Discuss the steps followed in investigation of an epidemic.

(10 marks × 4 = 40 marks)

5. Short notes:

- 5A. Epidemiological determinants for Hepatitis E infection
- 5B. Modes of transmission of HIV infection
- 5C. Salk vaccine
- 5D. Types of immunity
- 5E. Objectives for HIV sentinel surveillance
- 5F. Anti-TB treatment

(5 marks × 6 = 30 marks)



MANIPAL UNIVERSITY
SECOND SEMESTER MASTER OF PUBLIC HEALTH DEGREE
EXAMINATION – MAY/JUNE 2016

SUBJECT: ENH – 610: INDUSTRIAL HYGIENE AND HEALTH
(SPECIALIZATION: ENVIRONMENTAL AND OCCUPATIONAL HEALTH)

Friday, June 03, 2016

Time: 10:00 – 13:00 Hrs.

Maximum Marks: 70

✂ **Long essays:**

1. Define noise. Describe various noise related health hazards and methods to prevent them.
2. Describe zoonotic diseases in agricultural workers with measures to prevent them.
3. Write a protocol of industrial hygiene survey in fisheries plant.
4. Describe different air sampling methods. Discuss their advantages and disadvantages.

(10 marks × 4 = 40 marks)

5. **Short notes:**

- 5A. Substitution
- 5B. Local exhaust ventilation
- 5C. Sound level meter
- 5D. Biological Exposure Index
- 5E. Short Term Exposure Limit (STEL)
- 5F. Walk through survey

(5 marks × 6 = 30 marks)

