



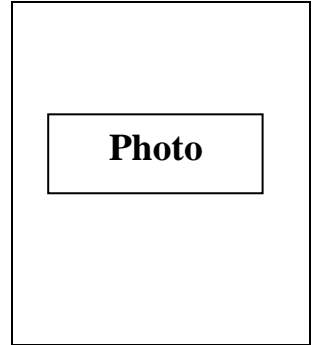
Mansoura University
Faculty of Medicine
Community Dept

LOG BOOK

Community Department

(2014-2015)

**Mansoura University
Faculty of Medicine
Public Health and Community Medicine Department**



Student's Name:

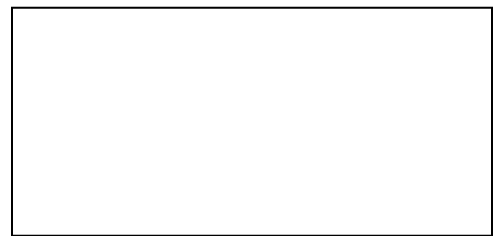
E-mail Address:

Serial Number:

Round Number:

Group:

Mark:



Department Stamp

Vision

*Promotion of Outstanding Programs
of Medical Care to Serve Society and
to Promote*

Environmental Development

Mission

*Development of an Outstanding,
Honorable Practitioner, Capable of
Providing*

*International Standards of Medical
Care and Following Medical Ethics*

Preface

Dear students,

The Practical Activity Book is a guide for the fourth year medical students to enhance the specific skills and/or knowledge which should be acquired from careful reading and study of the assignments.

It constitutes an outline which initially conveys the major points or target areas of **The Public Health and Community Medicine** to be studied. Then, after the course is completed, the objectives serve as a review and check for the students, who can use them to determine if sufficient gains have been made in skills and/or understanding.

Practice exercises and solving problems are included within each topic to help students to apply the topic content. Answers to these exercises are valuable study guides for the final examination.

It is our sincere hope that you will find this work to be a profitable and satisfying one. We seek your constructive criticism at all times and ask that you let us know whenever you have problems or need assistance. We shall follow your progress with keen interest.

Prof. Dr. Abdel-Hady Elgilany

Head of the Department

Curriculum Content

Public Health and Community Medicine Course:

- **Lecture:** 128 hours
- **Tutorial:** 10 hours
- **Practical:** 54 hours

Academic Teaching Material:

1. Principles of Communicable Diseases Studies
2. Epidemiology of Some Selected Communicable Diseases
3. Epidemiology of Some Selected Non-communicable Diseases
4. Principles of Health Care Management
5. Management of Specific Health Care Services
6. Communication, Health Behavior, and Health Education
7. Environmental Health
8. Occupational Medicine
9. Nutrition
10. Research and Medical Statistics

Tutorial and Practical Material:

1. Epidemiologic Methods
2. Measurements of Health
3. Medical Statistics
4. Communication and Health Behavior
5. Health Education

6. Investigation of an Outbreak
7. Prevention and Control of an Outbreak
8. Epidemiology of Some Selected Communicable Diseases
9. Blood Bank
10. Health Care Management
11. Health Care Quality Management
12. Primary Health Care Services
13. Occupational Health
14. Water and Health
15. Nutrition in Health and Disease

Intended Learning Outcomes of Course (ILOs)

I. Knowledge and Understanding:

1. Understand the epidemiology and determinants of communicable and non-communicable life threatening illnesses affecting the body and each of its major organ systems, presenting throughout the age spectrum.
2. Identify the prevalent health problems in a community, using various epidemiological strategies.
3. Recognize trends in health and disease.
4. Enumerate and interpret behavioral and social variables impacting health and disease.
5. Identify the risk factors, principles of disease prevention and early detection of common community health problems including nutritional, occupational and environmental health related problems.
6. Get insights concerning the principle and organization of National Health Care System.

7. Recognize the epidemiological principles of demography and biological variability.
8. List the principles of disease surveillance and screening.
9. Understand communicable disease control and health promotion.
10. How to utilize the population-based approaches to health care services and their role in improving medical practice.

II. Intellectual Skills

1. Design prevention and control programs for communicable and non-communicable health problem of special public concern.
2. Select and use appropriate health education methods and materials.
3. Apply risk assessment methodology to diverse of health problems and or injuries, to determine strategies for appropriate response.
4. Evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
5. Apply research and statistical methods in studying health problems of public concern
6. Formulation of research questions that is pertinent to medicine.
7. Precisely collect, analyze and interpret medical data.

III. Professional skills

1. Adopt suitable measures for prevention and control of communicable and non-communicable diseases.
2. Utilize communication skills and health education messages in caring of patients and apply appropriate infection prevention practices/ universal precautions.

IV. General and Transferable Skills

1. Use information and communication technology effectively in the field of public health and preventive medicine.
2. Retrieve, manage, and manipulate information by all means, including electronic means.
3. Present information related to public health problems clearly in written, electronic and oral forms.
4. Communicate ideas and arguments effectively.
5. Work effectively within a team, respect patients, their relatives, senior and other colleagues involved in his teaching and subsequently in his future practice.
6. Analyze and use numerical data including the use of simple statistical methods and evaluate indicators of health and disease.
7. Evaluate their work and that of others using constructive feedback.

Method of Assessment:

1. End of Round: 60 marks

- Pratical book activities 6 marks
- Problem solving exam 14 marks
- Multistations exam..... 10 marks
- Final Round MCQ 30 marks

2. Final Written exam (2papers): 150 marks

- Time of written exam: (1.5 hour/ paper)
- Type of written exam: short essay questions

3. Final Oral Exam: 30 marks

4. Final MCQ Exam: 60 marks

Total(300 marks)

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Attendance of Round Teaching

Week	Core Activities	Signature
1 st Week (Wca 1)		
2 nd Week (Wca 2)		
3 rd Week (Wca 3)		
4 th Week (Wca 4)		
5 th Week (Wca 5)		
6 th Week (Wca 6)		

Overall Round Teaching

Sessions	Total Number	Number Attended	% of Attendance

A Minimum of 70 % Attendance of Sessions is a Requirement for Students to Be Eligible to Attend the Final Round Exam.

Student Evaluation Forms

Tutor Signature

1

Date of session: / / 20

1. Epidemiologic Methods

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercise 4:

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Exercise 5:

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Exercise 6:

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Exercise 7:

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Exercise 8:

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Exercise 9:

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Exercise 10:

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Exercise 11:

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Exercise 12:

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2. Questionnaire

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercise 4:

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Exercise 5:

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3. Hospital Statistics

Exercise 1:

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Exercise 2:

Tutor Signature

Exercise 3:

Tutor Signature

Exercise 4:

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Date of session: / / 20

4. Measurements of Health

Exercise 1:

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Exercise 2:

Tutor Signature

Exercise 3:

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Exercise 4:

Tutor Signature

Exercise 5:

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Date of session: / / 20

5. Medical Statistics

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Date of session: / / 20

6. Communication and Health Education

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercise 4:

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Exercise 5:

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7. Investigation of an Outbreak

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercise 4:

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Exercise 5:

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Exercise 6:

Tutor Signature

Date of session: / / 20

8. Epidemiology of Some Selected Communicable Diseases

8.1 Tuberculosis

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercise 4:

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Exercise 5:

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Date of session: / / 20

8.2 Meningococcal Meningitis

Exercise 1:

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Exercise 2:

Tutor Signature

Exercise 3:

Tutor Signature

Exercise 4:

Tutor Signature

8.3 Diarrheal Diseases

Exercise 1:

Tutor Signature

Tutor Signature

Exercise 2:

Tutor Signature

Exercise 3:

Tutor Signature

Exercise 4:

Tutor Signature

Exercise 5:

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8.4 Infection Control Measures

- 1. How many steps of proper hand washing**

- 2. When should I wash my hands with water and soap?**

- 3. Proper duration of washing your hands with water and soap isand If you will use alcohol based hand rub is**

- 4. Regular waste should be disposed incolored bags**

- 5. Infected waste will be disposed in colored bags.**

- 6. Human tissues and placenta will be disposed incolored bags**

- 7. Example of sharps:**

- 8. If you have to do recapping, you will use**

- 9. Standard precautions of isolation applied to**

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10.Types of transmission based isolation precautions

11.Examples of diseases need airborne precautions

12.Sharp containers should be disposed if full.

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9. Blood Bank

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10. Health Care Quality Management

Exercise 1:

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Exercise 2:

Tutor Signature

Exercise 3:

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11. Maternal and Child Health Care

Exercise 1:

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Exercise 2:

Tutor Signature

Exercise 3:

Tutor Signature

Exercise 4:

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Exercise 5:

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Tutor Signature

Date of session: / / 20

12. Expanded Program on Immunization

Exercise 1:

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Exercise 2:

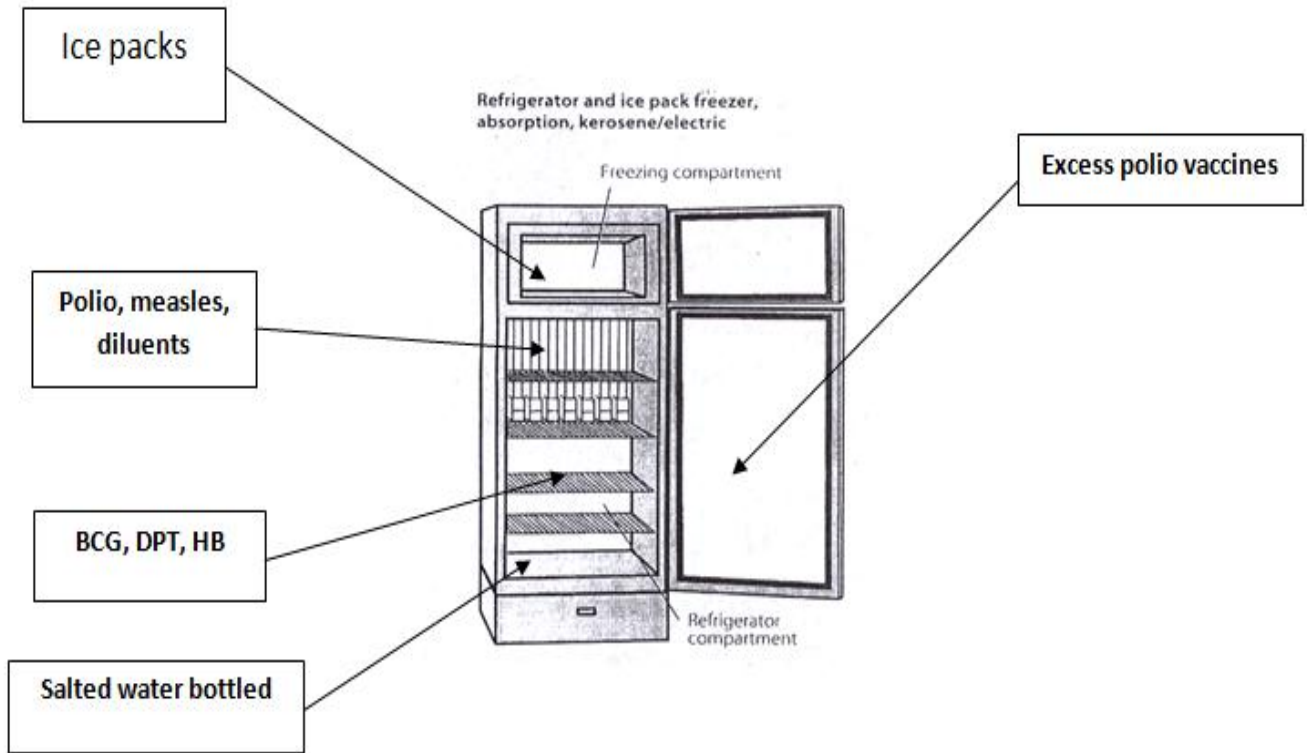
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Exercise 3:

Exercise 4:

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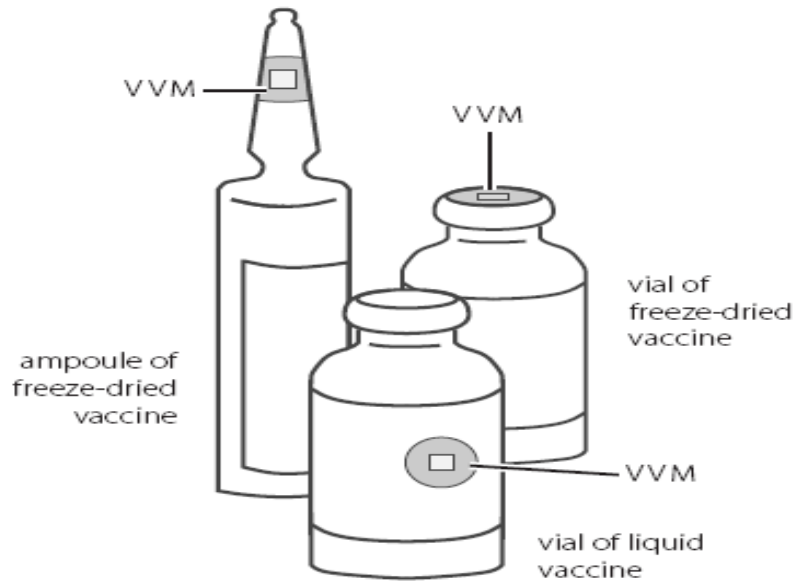
Exercise 5:



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Exercise 6:

Comment whether the vaccine is damaged or not as shown by VVM?



Exercise 7:

Tutor Signature

Exercise 8:

Exercise 9:

Tutor Signature

Exercise 10:

Tutor Signature

Date of session: / / 20

13. Occupational Health
13.1 Occupational Devices
SPIROMETER



Tutor Signature

Tutor Signature

AUDIOMETER



Tutor Signature

Tutor Signature

Tutor Signature

VIBRAMETER



Tutor Signature

GEIGER MULLER COUNTER



Tutor Signature

SOUND LEVEL METER



Tutor Signature

Date of session: / / 20

13.2 Personal Protective Equipment (PPE)

I. Eye protection

a



b



c



Name of equipment:

a.

b.

c.

Indications for use:

1.

2.

3.

Tutor Signature

II. Head protection



Tutor Signature

III. Hand and arm protection



Name of instrument:

Indications for use:

.....
.....

IV. Body protection



a



b

Name of instrument:

a.

b.

Indications for use:

1.

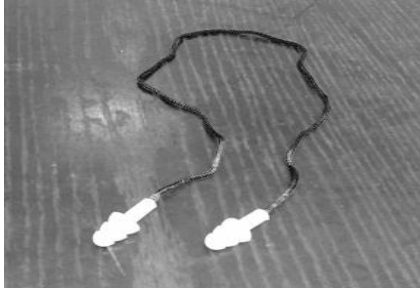
2.

Tutor Signature

V. Hearing protection



a



b

Name of equipment:

a.

b.

Indications for use:

.....
.....

Tutor Signature

VI. Respiratory protection

a



b



Name of equipment:

a.

b.

Indications for use:

.....
.....
.....

Tutor Signature

Date of session: / / 20

14. Water and Health

Tutor Signature

Tutor Signature

Date of session: / / 20

15. Nutrition in Health and Disease
Assessment of the Nutritional Status

Exercise 1:

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Exercise 2:

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Exercise 3:

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Exercises 4:

Tutor Signature

Exercises 5:

Tutor Signature

Exercise 6:

Tutor Signature

Exercise 7:

Tutor Signature

Exercise 8:

Tutor Signature

Student Field Visit Forms

Tutor Signature

Date of session: / / 20

Visit Form

Tuberculosis (Chest Hospital)

1. Comment on the following items of hospital design:

1.1 Site of the building

• **Suitable** • **Not suitable**

1.2 Number of departments

1.3 Are the inpatient services in a separate building from outpatient?

• **YES** • **NO**

2. What are the diseases treated by and admitted to the chest hospital during your visit?

.....
.....
.....
.....

3. What are the preventive measures applied for different respiratory diseases?

.....
.....
.....
.....

4. Is **BCG** vaccine available in the hospital?

• **YES** • **NO**

- Target groups for **BCG** vaccination are:

.....
.....
.....
.....

5. Is there a health education message given to patients with chest disease in general and TB patient in particular?

• **YES** • **NO**

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If yes, what is it?

.....
.....
.....
.....

6. Is there screening test done for detection of T.B?

• **YES**

• **NO**

If yes, what is it?

.....
.....
.....
.....

7. Steps done to confirm the diagnosis of T.B

.....
.....
.....
.....

8. What are the most common findings in X-ray of T.B patients?

.....
.....
.....
.....

9. Concerning **Tuberculin test**, complete the following:

1. Indications of the test:

a.....

c.....

b.....

d.....

2. Interpretation of the test:

.....
.....
.....
.....

Tutor Signature

10. What is meant by **DOTS** strategy? Is it practically applied?

.....

11. What are the available anti-TB drugs in the hospital?

.....

12. What are the methods used for sputum disinfection in chest hospital?

.....

13. What are the discharge criteria of a T.B patient from chest hospital?

.....

14. Complete the following table from the hospital records.

Numbers, age and gender distribution of admitted cases of infectious pulmonary diseases during the past month.

Disease	Total number of cases	Mode of transmission	Gender		Age group in years		
			Female	Male	<20	20-40	>40

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Date of session: / / 20

Visit Form

Blood Bank

1. Comment on the following items of blood bank design:

- 1.1 Site of the building
 • **Suitable** • **Not suitable**
- 1.2 Accessibility
 • **Yes** • **.NO**
- 1.3 Number of departments

2. Comment on the following items of blood bank structure:

Structure	Present	Absent
1. Electricity (from outside power plant)	<input type="checkbox"/>	<input type="checkbox"/>
2. Generator	<input type="checkbox"/>	<input type="checkbox"/>
3. Running water, indoor taps	<input type="checkbox"/>	<input type="checkbox"/>
4. Running water, outside taps	<input type="checkbox"/>	<input type="checkbox"/>
5. Toilet for staff	<input type="checkbox"/>	<input type="checkbox"/>
6. Toilet for patients	<input type="checkbox"/>	<input type="checkbox"/>
7. Refrigerators	<input type="checkbox"/>	<input type="checkbox"/>
8. Vehicles	<input type="checkbox"/>	<input type="checkbox"/>
9. Telephone	<input type="checkbox"/>	<input type="checkbox"/>
10.Fax	<input type="checkbox"/>	<input type="checkbox"/>

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3. What is meant by provision of safe effective blood and blood products?

-Safe blood/ products is.....

-Effective blood/ products is.....

4. What are the exclusion criteria of blood donors?

a.

b.

c.

5. What is the screening test done for?

a. HBV.....

b. HCV.....

c. HIV.....

6. Comment on the following items of Infection control measures

Item	Present	Absent
1. Use of bleaching solutions	<input type="checkbox"/>	<input type="checkbox"/>
2. Use of personal protective barriers	<input type="checkbox"/>	<input type="checkbox"/>
3. Segregation of waste	<input type="checkbox"/>	<input type="checkbox"/>
4. Bio-medical waste pits set up/ functional	<input type="checkbox"/>	<input type="checkbox"/>
5. Disposal of sharps	<input type="checkbox"/>	<input type="checkbox"/>

7. What is the disinfectant used to clean surfaces when contaminated with blood?

8. What are the measures carried out for disposal of the needle box?

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9. Did the blood bank staff receive pre-employment vaccination with Hepatitis B vaccine?

YES **NO**

10. Are there records of needle stick injuries for the blood bank staff?

YES **NO**

And what are the measures done for the injured staff?

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Date of session: / / 20

Visit Form

Occupational Health Hazards of Nitrogenous Fertilizer Industry

a. Collection of data:

- Site of the factory
- Relation to the residential area.....
- Departments of the workplace/ number of workers and their gender distribution:

Department	Number of workers in each department	Male	Female

-Materials used in the factory:

- **Raw materials**
- **Intermediate/ by- products**
- **End products**
- **Waste disposal methods**

- Are there safety records? • YES • NO
- Are there medical records? • YES • NO

-Occupational health team in the factory: -

<i>Occupation</i>	Number
Physician	
Industrial hygienist	
Ergonomist	
Epidemiologist	
Nurse	
Safety engineer	
Lawyer	

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b. Observe the following:

- Observe the working environment for the following: -

- | | | | | |
|--|-----|--------------------------|----|--------------------------|
| • Gases and vapors | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Dust | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Abnormal odors | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Noise | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Adequacy of illumination | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • High/ low temperature | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Enviromental sanitation and cleanliness | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Washing facilities | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |

- Observe the workers practice:-

- | | | | | |
|---|-----|--------------------------|----|--------------------------|
| • Eating/ drinking/smoking while working | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
| • Workers unsafe practice | | <input type="checkbox"/> | | <input type="checkbox"/> |

If yes, specify-----

• **Observe workers compliance with personal protective equipment:**

- | | | | |
|--------------------|--------------------------|------------------------|--------------------------|
| Hard hat | <input type="checkbox"/> | Safety shoes | <input type="checkbox"/> |
| Goggles | <input type="checkbox"/> | Safety spectacles | <input type="checkbox"/> |
| Hearing protectors | <input type="checkbox"/> | Respiratory protection | <input type="checkbox"/> |
| Overalls | <input type="checkbox"/> | Gloves | <input type="checkbox"/> |

- Observe the safety measures:

- | | | | | |
|---|---------|--------------------------|--------|--------------------------|
| • Warning and labeling aids | Present | <input type="checkbox"/> | Absent | <input type="checkbox"/> |
| • Firefighting equipment | Present | <input type="checkbox"/> | Absent | <input type="checkbox"/> |
| • 1st aid boxes and emergency measures | Present | <input type="checkbox"/> | Absent | <input type="checkbox"/> |

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c. Evaluate the possible health hazards

- Environmental monitoring (hazard assessment):

Hazard	Monitoring method
Air borne chemicals	
Noise	
Ionizing radiation	
Vibration	
Heat stress	
Humidity	

- Accidents/ Injuries:

Type of accident	Number in the last month	Department	Average number of days lost/ accident

a. Analysis of the results:

At the end of your visit, what are the possible occupational health hazards in the workplace?

- Physical
- Chemical
- Mechanical
- Psychological

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Date of session: / / 20

Visit Form

Water and Health (Water Purification Station)

According to your visit to the station, answer the following:

- The site of water intake is characterized by:
.....
.....
.....
.....
.....
.....
.....
.....
- The material used in coagulation is
.....
.....
- This material is added in a dose of
.....
- This material is added to water in order to
.....
.....
- The type of filters used is
.....
- The type of disinfectant used is
.....
- This disinfectant is added in a dose of
.....
- What are the tests done for water before distribution?
.....
.....
.....
.....

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- How often are these tests done?

.....
.....
.....
.....
.....

- If the sample from potable water shows positive **coliform test**,
-It indicates

.....
.....

- The possible cause is

.....
.....

- The measures done for this water are

.....
.....
.....
.....

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Date of session: / / 20

Visit Form

Health Office

According to your field visit, answer the questions you have:

1. What are the functions of the health office?

.....
.....
.....
.....
.....
.....
.....
.....

2. What are the vaccinations given for international travelers?

.....
.....
.....
.....

3. Regarding the cold chain system:

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. Is the refrigerator placed in well aerated place in the room? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the temperature chart stick to the refrigerator door? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. What was the temperature recorded this morning? | °C | |
| 4. Is there thermometer inside the refrigerator? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the different types of the vaccines are kept in proper way in the refrigerator? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is the poliomyelitis vaccines kept inside the freezer? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are measles and MMR vaccines kept on the first shelf? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Does the vial of DPT show a precipitate? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Do they have DT vaccine in the refrigerator? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Do they keep DPT vaccine cold during vaccination session? | <input type="checkbox"/> | <input type="checkbox"/> |

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Date of session: / / 20

Visit Form

Preventive Medicine Administration

According to your field visit, answer the questions you have:

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Date of session: / / 20

Visit Form

Malaria Control Unit

According to your field visit, answer the questions you have:

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Tutor Signature

Date of session: / / 20

Visit Form

Family Health Unit

According to your field visit, answer the questions you have:

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Tutor Signature

Date of session: / / 20

Visit Form

Maternal Child Health Care Unit

According to your field visit, answer the questions you have:

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*Public Health and
Community Medicine
Department*