

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD**  
*(Department of Home & Health Sciences)*

**Course: Medical Sciences-I (7503)**  
**Level: Post Graduate**

**Semester: Spring, 2014**  
**Credit Hours: 3(3+0)**

**CONTENT LIST**

1. Course Book (1)
2. Assignments (1&2)
3. Course Outline Unit 1–9
4. Assignment forms (02 Sets)
5. Assignment Schedule

**Note:** If any one item of the above mentioned content list is missing from your study pack. Kindly contact:

***Mailing Officer***  
***Mailing Section***  
***Block No.28***  
***Allama Iqbal Open University,***  
***Sector H-8, Islamabad***

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD**  
(Department of Home & Health Sciences)

**WARNING**

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

Course: Medical Sciences-I (7503)  
Level: Post Graduate  
Total Marks: 100

Semester: Spring, 2014  
Credit Hours: 3 (3+0)  
Pass Marks: 40

**ASSIGNMENT No. 1**  
(Units: 1–4)

*Note: Attempt all questions. Marks are given against each question.*

- Q. 1 Explain the division of human body systems. How the respiration process takes place in the body. Explain in detail with the help of diagrams. (16)
- Q. 2 Which epidemiological methods are used for measurement of health and disease status in a given population? Compare and contrast the method of analysis of different types of epidemiological studies. (16)
- Q. 3 Define Epidemiology. Which contributing factors would you keep in mind while collecting data for presence of Coronary Heart Diseases in the community? (16)
- Q. 4 Explain the role of each member of health team for maintenance or re-establishment of patient's health. (16)
- Q. 5 What are the primary sources of microorganisms found in foods? Explain with examples. (16)
- Q. 6 Write short answers on the following. (10 x 2=20)
- i) Assessment of *cause* on the basis of causal inferences
  - ii) Common food borne molds

**ASSIGNMENT No. 2**  
**(Units: 5–8)**

*Note: Attempt all questions. Marks are given against each question.*

- Q. 1 What is “Food Toxemia”? Explain its causes, signs & symptoms, and methods of prevention. **(16)**
- Q. 2 What kind of special measures should be taken to minimize the spread of contagious diseases? Explain in detail. **(16)**
- Q. 3 How the drugs affect the nutrient metabolism in the human body. Explain with examples. **(16)**
- Q. 4 Explain different types of fever. Discuss their causes, signs & symptoms and methods of prevention in detail. **(16)**
- Q. 5 Enlist common communicable diseases with special reference to Pakistan. Also compare their incubation period, infective period, signs and symptoms and ways of prevention in detail. **(16)**
- Q. 6 Write short answers on the following: **(10 x 2=20)**
- i) Meat Borne Diseases.
  - ii) Malabsorption of Nutrients due to Drug Intake

## STUDENT GUIDE

**Medical Sciences-I (7503)**  
**Level: Post Graduate**

**Semester: Spring, 2014**  
**Credit Hours: 3(3+0)**

Dear Student,

Aslam o-Alaikum

We welcome you to this AIOU Post Graduate level course of Medical Sciences–I (7503) which is one of the compulsory courses of Post Graduate Diploma in Dietetics and later on M.Sc. Community Health & Nutrition. Its course book comprises of 1-9 units.

### 1. Course Objectives:

- a. To have an overview of anatomy, physiology, and biochemistry of the human body.
- b. To have thorough understanding of hospital Environment of Hospital and components of patient care.
- c. To know and understand about drug metabolism and effect of drug-nutrient interaction on metabolism.
- d. To get in-depth knowledge of their role as dietitian in patient care.

### 2. Details of the Course

You should read the following details of the course carefully.

#### 2.1 Study Book

**Medical Sciences–I** is having a weightage of 3(3+0) credits. It means three credit hours for theory only and having no practical component. In this course human body and its ailments, primary sources of microorganisms found in foods and diseases connected with foods and water are discussed in a very simple and comprehensive way. It will help you to know about anatomy, physiology and biochemistry of human body as well as Food Microbiology and diseases connected with food and water. Furthermore it will help you in understanding the infectious diseases and their prevention. You are further advised to do extra study related to the contents of the book. The relevant material in the papers/articles in research journals magazines is available at their local libraries. Further you can discuss the different topics in the workshop with your class fellows, tutors and with resource

persons. It will help you in uplift and enlighten your knowledge and information about a specific topic.

## **2.2 Part Time Tutor for Lectures**

You are allocated a part time tutor. The name and address of your tutor will be provided later. The tutor will help and guide you in studying the book and conducting activities related to study units. You are expected to take full advantage of the tutor's knowledge and experience. These tutors are also responsible for marking your assignments. Make all efforts to complete your written assignment in time according to the prescribed schedule. Try your best to attend all the study sessions according to the time table provided to you.

## **2.3 Assignments**

This course includes two assignments which are compulsory for successful completion of 100 marks, out of these students obtaining a minimum of 40% marks will be declared pass. Therefore it is important to submit the assignments well prepared and in time. The schedule of submitting the assignment is being provided separately. Please follow the schedule. The tutor will send the marked assignment back to you within fifteen days. If you do not receive the marked assignment within fifteen days please contact your tutor or your local regional office of the Allama Iqbal Open University.

Never forget to attach the prescribed forms duly filled along with the complete assignments. The study units on which each assignment is based are identified. However for your convenience we are providing the related information for follow up.

<b>Assignment No.</b>	<b>Units</b>
1	1-4
2	5-8

## **2.4 Method of Study**

A study period of sixteen weeks has been allocated for studying this course through distance learning whereas seventeenth and eighteenth weeks are kept for general assessment and for final examination. You are expected to spend four weeks on

studying first two units of the book. This will help to improve your reading speed and get familiar with the contents of the units.

<b>Sr. No</b>	<b>Unit No.</b>	<b>Assignment No.</b>	<b>Study period</b>
1.	1-2		Four weeks
2.	3-4	1 <sup>st</sup>	Four weeks
3.	5-8		Four weeks
4.	9	2 <sup>nd</sup>	Four weeks
5.	Preparation for Exams		Two weeks

The next two units i.e. 3 & 4 will be easier for you and you will be able to study them in comparatively less time. You can spend three weeks on studying these two units. During the eighth week you can complete your 1<sup>st</sup> assignment and dispatch it to your tutor. Unit 5, 6, 7 & 8 can be studied during 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> week and the last unit i.e. unit 9 can be studied in the 13<sup>th</sup> week and the 2<sup>nd</sup> assignment can be completed along with 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th</sup> week. The last two weeks can be kept for examination and its preparation. It is therefore necessary to study the units completely before starting work on assignments.

## **2.5 Workshop**

Workshop will be arranged for three days. Schedule of the workshop and venue will be sent to you during the study period. Workshop will cover some of the lectures of the specialists on important topics. The tutor will provide guidance for the workshop. Attendance, in workshop is compulsory for all the students.

## **2.6 Final Examination**

At the end there will be a final examination for each course. All the students will be expected to take this examination in the examination halls specially established for this purpose.

*Course Coordinator*

**ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD**  
**Department of Home and Health Sciences**

**Course Outlines: MEDICAL SCIENCES - I (7503)**

**Level: Post Graduate**

**Credit Hours: 3(3+0)**

**UNIT 1: GENERAL HUMAN ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY**

- Introduction to the Systems of the Human Body
- The Circulatory System
- The Respiratory System
- The Excretory System
- Common Danger Signals of Disease

**UNIT 2: PRINCIPLES OF EPIDEMIOLOGY**

- Definition and Introduction to Epidemiology
- Major characteristics of the Distribution of Disease
- Prevention of Different types of Diseases
- Analysis of Different Types of Study Designs

**UNIT 3: MEDICAL CARE IN THE HOSPITAL**

- Introduction to Therapeutic environment
- The Impact of the Hospital on the Patient and his Family
- The Environment of the Hospital (Social, Physical etc)
- Basic Principles for the Care of Admitted patients

**UNIT 4: FOOD MICROBIOLOGY**

- Primary Sources of Micro-Organisms Found in Foods
- Common Food Borne Bacteria
- Genera of Molds Common to Foods
- Genera of Yeasts Common to Foods

**UNIT 5: FOOD AND WATER BORNE DISEASES**

- Diseases Connected with Food
- Diseases Connected with Water

**UNIT 6: INFECTIOUS DISEASES AND THEIR PREVENTION**

- Home care for Contagious Diseases

- Adenovirus Infections
- Chicken Pox, Cholera, The Common Cold, Diphtheria, Meningitis, Rheumatic fever, HIV, AIDS, Hepatitis & T.B. etc

#### **UNIT 7: DIAGNOSIS TREATMENT AND CONTROL OF INFECTIONS**

- Diagnosis treatment and control of infections
- Communicable diseases
- Infections and its spread
- Control of infections

#### **UNIT 8: DRUG METABOLISM**

- Drugs versus Nutrients
- Effect of drugs on Food intake
- Effect of absorption on bioavailability of nutrients and drugs
- Effect of Drug-Nutrient Interaction on Metabolism and Excretion

#### **UNIT 9: DISEASES OF REPRODUCTIVE SYSTEM**

- Diseases of male reproductive system and their prevention
- Diseases of the female reproductive system and their prevention

#### ***Recommended Books:***

- 1) AIOU compiled reference material, Medical Sciences, Course Code 860
- 2) Robert B. Wallace, Public Health and preventive medicine, 2008, Published by McGraw Hill.
- 3) Brett J.Cassens, Preventive Medicine and Public Health, 1992. Amazon.Com.

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