

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

**Course: Modern Nutrition in Health & Disease (1781)**  
**Level: M.S** **Semester: Autumn, 2013**  
**Credit: 3(3 + 0)**

**CONTENT LIST**

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2. Course Outline (Unit 1-9)
3. Theory Assignments Two
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5. Schedule for submitting assignments, practical and workshops.

**Note:** If any item from the above mentioned content list is missing from your study packet, kindly contact:

**The Mailing Officer**  
**Mailing Section**  
**Services and Operational Block**  
**Allama Iqbal Open University**  
**Sector H-8, Islamabad**

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**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: Modern Nutrition in Health & Disease (1781) Semester: Autumn, 2013**

**Level: M.S**

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

**Total Marks: 100**

**Pass Marks: 50**

**ASSIGNMENT No. 1**

**Units (1-4)**

*Note: All questions are compulsory. Each question carries equal marks.*

- Q.1 What is meant by Amino Acid Pool? How are Amino Acids distributed and transported in the body? (20)
- Q.2 Discuss Hormonal Regulation of Carbohydrate metabolism. (20)
- Q.3 Describe signs and implications of deficiency and excess of following minerals/vitamins in the body.
- a) Manganese (10)
  - b) Vitamin A (10)
- Q.4 Discuss Vitamin D as Anti-Ricketic factor. Elaborate on its role in calcium and phosphorus metabolism. (20)
- Q.5 Elaborate on the biological role of calcium in the body. Discuss deficiency symptoms and treatment among children and adults. (20)

**ASSIGNMENT No. 2**

**Units (5-9)**

**Total Marks: 100**

**Pass Marks: 50**

*Note: All questions are compulsory. Each question carries equal marks.*

- Q.1 What are the health implications of chemosensory disorders? Discuss the effect of Nutritional Status on chemosensory functions. (20)
- Q.2 Define metabolic syndrome. Discuss its relationship to insulin resistance and clinical utility. (20)

- Q.3 Define obesity as health problem. Elaborate on this health issue as a disorder of energy balance. (20)
- Q.4 Discuss etiology and risk factors of behavioral disorders affecting food intake. Elaborate on role of nutritionist in management of these disorders. (20)
- Q.5 Discuss protein Energy Malnutrition as Nutritional disorder among children with special reference to Pakistan. Compare the situation with developed countries with the help of recent most review of literature. (20)
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### **COURSE OUTLINE OF MODERN NUTRITION IN HEALTH & DISEASE-I (1781)**

- Unit 1: Major dietary constituents, Energy Needs and Signs of Clinical Deficiencies
- Unit 2: Vitamins and Signs of Clinical Deficiencies
- Unit 3: Minerals and Signs of Clinical Deficiencies
- Unit 4: Other Compounds with Health Relevance
- Unit 5: Metabolic Regulation
- Unit 6: Metabolic Syndrome
- Unit 7: Obesity and Physical Fitness
- Unit 8: Psychiatric and Behavioral Disorders
- Unit: 9: Pediatric Nutritional Disorders