

**B.Sc. (CBCSS) FAMILY AND COMMUNITY SCIENCE
PROGRAMME (HOME SCIENCE)**

VI - Semester

HS6BO10U – CLINICAL NUTRITION AND DIETETICS

(THEORY 54 hours; Practical 36 hours =90 hours)

Credits: 4 (Theory 3 & Practical 1)

Objectives:

To enable the students

- To impart knowledge in the field of clinical nutrition
- Be able to make appropriate dietary modifications for various disease conditions based on the pathophysiology
- To develop capacity and aptitude for taking up dietetics as a profession
- Understand the consequences of nutritional problems in the society and have awareness on community nutrition based programmes.

Module I. Introduction to Dietetics and Types of Diets (6 hours)

Meaning and scope of dietetics, Role of Dietitian, Nutrition care process (NCP),
Types of dietary adaptations for therapeutic needs.
Types of Diets – Normal / General, soft and liquid diets
Mode of feeding – Oral , Enteral and Parenteral feeding

Module II. Nutritional Management of infections and fevers (4 hours)

Classification and etiology of fever / Infection
Medical Nutrition therapy in: Typhoid, Tuberculosis, HIV/AIDS

Module III. Nutrition, Diet and Cancer (4 hours)

Etiological risk factors for cancer, Dietary and nondietary factors, Genetic factors,
Environmental factors; Nutritional requirements for cancer patients, dietary
Management in cancer and feeding problems related to cancer therapy.

Module IV. Nutritional Management of Diabetes Mellitus (4 hours)

Prevalence, classification and etiology of diabetes mellitus, symptoms, diagnosis and complications .

Management of Diabetes:-Dietary management – glycemic Index, beneficial effects of some foods, supportive therapy, prevention.

Module V. Nutrition and Coronary Heart Diseases (CHD) (6 hours)

Common disorders and complications of CHD, Prevalence, etiology and symptoms, Dietary management, Prevention of CHD.

Atherosclerosis-Phases, Etiology, Symptoms, Complications, Nutritional Management

Hypertension- Classification of BP, Hypertension - stages , etiology, dietary management, DASH diet

Module VI. Gastro Intestinal Disorders (4 hours)

Etiology, symptoms and dietary Management of :
Peptic ulcer, Constipation, Diarrhoea

Module VII. Liver Diseases (4 hours)

Etiology, symptoms and dietary Management of:
Hepatitis, Cirrhosis, Hepatic Coma

Module VIII. Nutritional Management of Renal Disorders (4 hours)

Common Renal Diseases, General Principles of dietary Management in Renal diseases, Etiology, Clinical symptoms and Dietary Management of Acute and chronic Nephritis, Nephrotic Syndrome

Module IX. Nutritional care in weight Management (4 hours)

Weight imbalance, prevalence and classification; Guidelines for calculating ideal body weight. Etiology, Clinical manifestations, consequences and Dietary Management of Obesity, Underweight

Module X. Public Health Nutrition

(6

hours)

Concept and scope, Levels of Health care; Primary secondary and Tertiary role of Nutritionist in Health care Delivery, Multiple causes of Public Nutrition problems, Malnutrition and its economic consequences

Module XI. Nutritional Problems of the Community

(8

hours)

Prevalence, causes, consequences prevention and control of

- Protein Energy Malnutrition (PEM)
- Vitamin A deficiency
- Iodine Deficiency Disorders
- Iron Deficiency Anemia

National Programmes for control of malnutrition: Integrated Child Development Services (ICDS), Food subsidy programmes-PDS and targeted PDS, MDM or SMP, Micronutrient programmes: - NNACP, Vitamin A prophylaxis programme, NIDDCP.

HS6BO10U (P) – CLINICAL NUTRITION AND DIETETICS

Credit-1

(36 hours)

- Preparation of Therapeutic Recipes (4 Hours)
 - Types of Therapeutic Diet (2 hours)
 - Normal
 - Soft
 - Fluid – Full Fluid and Clear Fluid Diets
- III. Diet plan for
- a) Fevers (26 Hours)
 - Cancer- breast cancer
 - Diabetes Mellitus
 - CHD
 - Peptic Ulcer

- Hepatitis
- Cirrhosis
- Nephritis
- Nephritic syndrome
- Obesity
- Under weight
- PEM
- Iron Deficiency Anaemia

IV. Visit to a feeding programme / Diet clinic (4 Hours)

(A record of the entire practical should be maintained)

References:

- Whitney,E.N, Cataldo, C.B.,and Rolfes,S.R.(2002), Understanding Normal and Clinical Nutrition, Sixth Edn.Thomson Learning Inc.USA.
- Srilakshmi (2009) Dietetics IVth Edition , New age International (P) Ltd, Publishers, New Delhi
- Clinical Nutrition (2005) Blackwell Science Service, Nutrition Society UK.
- Public Health nutrition (2005), Edited by Nutrition society, Black well Science Service U.K.
- Bamji,M.S.,Krishnaswamy,K and Brahman(Eds.)(2009), Text book of Human Nutrition Third Edition Oxford & IBH publishing Co.Pvt.Ltd., New Delhi.
- L. Kathleen Mahan and Sylvia Escott- Stump, Krause's Food Nutrition and Diet therapy, 11th Edition, 2005, Saunders, USA.
- Subhangini. A. Joshy (2010), Nutrition and dietetics, Third edition. Tata Mc. Graw. Hill Education Pvt.Ltd, New Delhi
- Paul Insel, Elaine Turner, Don Ross (2004) Nutrition second edition American Dietetic Association, Jones and Barlett publishers, London

MAHATMA GANDHI UNIVERSITY
B.Sc. FAMILY AND COMMUNITY SCIENCE PROGRAMME
(HOME SCIENCE)
VI - Semester

Model Question Paper

HS6BO10U - CLINICAL NUTRITION AND DIETETICS

Time : 3 hrs

Max weightage-25

Section A

Objective type questions, weightage 1 for each bunch of 4 questions

I. Choose the correct answer:

- The form of blood cholesterol associated with an increased risk of atherosclerosis is:
 - triglycerides (B) Chylomicrons(C)LDL cholesterol(D) HDL cholesterol
- 2. Type I Diabetes Mellitus occurs due to the insufficient production of
 - Glucagon (B) Insulin (C) Aldosterone (D) Cortisol
- 3. Goiter is a deficiency disease of
 - Iodine (B) Selenium (C)Manganese (D) Zinc
- 4. Pallor of skin is a symptom of deficiency of:
 - (A) Iron (B) Thiamine (C) Calcium (D) Niacin

II. Fill in the blanks:

- -----is the causative organism of tuberculosis
- . The normal systolic pressure of an adult male is -----
- -----is a ranking of foods based on the postprandial blood glucose response.
- ----- is the chief cause of ulcer

III. Match the following

- | | | |
|---------------------|---|----------------------|
| 9. Typhoid | - | Oedema |
| 10. Alcoholism | - | Peyer's patches |
| 11. Kwashiorkor | - | Vitamin A deficiency |
| 12. Night blindness | - | Liver cirrhosis |

IV. True or False

13. A high protein diet is advised in dietary management of glomerulo nephritis
14. The lack of adequate fibre in the diet is a cause of constipation

15. High Density Lipoproteins are otherwise called bad cholesterol
16. Dietary protein is restricted in persons with high blood urea and oliguria

(4x1=4)

Part B

Short answer type questions, weight 1 each.
Answer any 5 of the following

17. List out the clinical symptoms of Iron deficiency Anaemia
18. What is an HIV infection?
19. Brief on total parenteral nutrition
20. What are the risk factors of cancer?
21. Write a brief note on peptic ulcer
22. Enumerate the clinical manifestations of Vitamin A deficiency
23. Define malnutrition and state its consequences.
24. What is the role of a dietician in the community?

(5x1=5)

Part C

Short essay type questions, weight 2 each
Answer any 4 each within one page

25. Explain the different types of Routine Hospital Diets?
26. Brief on the dietary management of tuberculosis
27. Give a brief account of common renal disorders?
28. Enlist the activities of ICDS
29. Explain the phases in the occurrence of liver cirrhosis?
30. State the nutritional requirements for cancer patients

(4x2=8)

Part D

Essay type questions, weight 4 each.
Answer any two each within three pages

31. Write an essay describing the symptoms and management of type II Diabetes Mellitus
32. Plan a day's meal for a patient suffering from cardiovascular disease and comment on the diet therapy.
33. Enumerate the possible risk factors and complications of obesity and overweight.

(2x4=8)
