#### SARDAR PATEL UNIVERSITY

## Rules & Regulations and Curriculum of Post Graduate Diploma in Clinical Dietetics (PG-DCD)

#### *Effective from JUNE-2012*

**RPGDCD-1**: A Candidate for admission to the Post Graduate Diploma in Clinical Dietetics (PG-DCD) must have passed B. Sc. (Home Science) (Food and Nutrition) / B. Sc (Home Science) (Food Science and Quality Control) (Vocational) of the Sardar Patel University or B. Sc (Nursing) or an examination of any other university recognized as equivalent to the above.

**RPGDCD -2**: The course of study for the Post Graduate Diploma in Clinical Dietetics shall be a full time course and its duration shall be of one academic year.

**RPGDCD -3**: A candidate who has passed an equivalent examining body and is seeking admission to the Institute recognized by this University shall not be admitted without producing on eligibility certificate from the Sardar Patel University.

**RPGDCD -4** : To become eligible to appear in the final examination conducted by Sardar

Patel University -

a) a candidate has to keep two terms at the Institute recognized for teaching the course of studies in Post Graduate Diploma in Clinical Dietetics by the university.

b) a candidate has to keep the minimum attendance of 75% in Theory and Practical separately.

c) a candidate has to obtain at least 35% marks in aggregate of all the papers in the internal tests conducted by the Institute.

**RPGDCD -5**: A candidate desirous of appearing at the Examination for the Diploma in Clinical Dietetics must forward his application in the prescribed form accompanied by a Certificate of attendance to the Registrar through the Head of the institute on or before the date prescribed for the purpose under the ordinance/s.

**RPGDCD -6**: For the purpose of deciding final result at this examination, the ratio between the Internal assessment and final University examination shall be 20:80 for both theory & practicals. For the purpose of internal assessment the Institute will conduct at least one test in each term.

**RPGDCD -7**: The final examination for the Post Graduate Diploma in Clinical Dietetics shall be held at the end of the academic year.

**RPGDCD -8**: The Post Graduate Diploma in Clinical Dietetics shall not be conferred upon a candidate unless he/she has passed in all the subject of the theory examination and the practical in accordance with the provisions of relevant regulations.

RPGDCD -9: The subjects and subject-wise credits for Post Graduate Diploma in Clinical

Dietetics will be as under.

Course Code	Subject	Credits per week	Teaching hours	
PGDCD-101	Basic Sciences 2		75	
PGDCD -102	Public health, Nutritional2Perspectives and FoodService management		75	
PGDCD -103	Clinical Dietetics	2	75	
PGDCD -104 (P)	Practical	2	90	
	315			
	690			
	1005			

**RPGDCD-10:** Examination System and Marks distribution for Theory and Practical Examination for Post Graduate Diploma in Clinical Dietetics will be as under.

Course Code	Subject	Duration of Examination	Distribution of marks		Total
		(hours)	University exam	Internal assessment	
PGDCD- 101	Basic Sciences	3 hours	80	20	100
PGDCD - 102	Public health, Nutritional Perspectives and Food Service management	3 hours	80	20	100
PGDCD - 103	Clinical Dietetics	3 hours	80	20	100
PGDCD - 104 (P)	Practical & Oral	1 day	160	40	200
	Total	1	400	100	500

### SARDAR PATEL UNIVERSITY

### Curriculum of

# Post Graduate Diploma in Clinical Dietetics (PG-DCD)

#### PAPER I : Basic Sciences

#### Course code: PGDCD-101

#### • HUMAN PHYSIOLOGY BLOOD & MUSCLE PHYSIOLOGY:

- Composition & function of blood
- Erythropoesis & Leucopoesis
- Hemostasis
- Action potential & mechanism of muscle contraction

#### **DIGESTIVE SYSTEM & SECRETARY SYSTEM:**

- Movement & Alimentary tract
- Delutition & Mechanism of Vomiting
- Digestive juices
- Micturition
- Mechanism of Urine Formation
- Regulation of acid-base balance

#### CARDIOVASCULAR & RESPIRATORY SYSTEM:

- Heart rate & Sound
- Blood pressure
- Cardiac cycle
- Mechanism of breathing
- O2 & Co2 transport
- Pulmonary volume & capacity

#### **ENDOCRINOLOGY & REPRODUCTIVE SYSTEM:**

- Spermatogenesis & Menstrual cycle
- Puberty
- Pregnancy & lactation
- Hormones of pituitary ,thyroid & parathyroid glands
- Hormones of Adrenal gland & Pancreas

#### NERVOUS SYSTEM & SPECIAL SENSES:

- Neuron & Neuralgia
- Properties of nerve fibre
- Reflex mechanism & receptors
- Mechanism of Vision & Hearing
- Taste & smell

#### **PRACTICALS:**

- Arterial Blood Pressure
- Pulse
- Heart rate
- Breathing rate

#### **REFERENCE BOOKS:**

- Guyton (Arthur) Text Book of Physiology Latest, Ed. Prism publishers
- Ganong (William F) Review of Medical Physiology,Latest Ed. Appleton
- Jain A K Concise Physiology, Latest Ed

## **CILNICAL PATHOLOGY Introduction to Clinical Pathology Introduction to Hematology**

- Normal constituents of blood ,their structure & function
- Hb, PCV, ESR
- Normal Haemostasis
- Bleeding time, clotting time, prothrombin time, activated partial thromboplastin time

#### **Functional tests & their interpretation**

- Gastric function tests
- Renal function tests
- Liver function tests
- Cardiac function tests
- Clinical Biochemical aspects of fluids ,electrolytes & acid base balance

#### **Clinical Enzymology**

#### **Endocrine Disorders**

Clinico-biochemical aspects of Galactoseuria, Fructoseuria, Pentosuria, Amino acidurea, Multiple myeloma, Cystic Fibrosis, Tropical Sprue.

Food & Water borne disease: Bacterial, Viral, Parasitic infections transmitted by contaminated food/water

Practical/Demonstrations As applicable for above topics.

#### **Reference books:**

- 1. A Manual of Lab.Techniques by NIN : N.Raghuramalu
- 2. Bancroft: Thoery & Practical of Histology techniques
- 3. Handbook of Blood Banking & Transfusion medicine : Gunau HR Rao
- 4. Manual for Clinical Pathology by Sabitry Sanyal
- 5. Pratical Pathology by Dr.P.Chakraborty & Gargi Chakraborty
- 6. Textbook of haematology: Dr.Tejinder Singh
- 7. Practical pathology by Dr.K.Uma Chaturvedi & Tejsidersingh

#### NUTRITIONAL PHARMACOLOGY:

- Routes of drug administration
- Pharmacokinetics
- Pharmacodynamics
- Adverse drug reactions
- Food & Drug interactions
- Effect of food, nutrients & national status on drug dosage & efficacy
- Overview of ANS/ CVS
- Appetite stimulant & inhibitor drugs
- Hyperlipidaemias
- Obesity
- GIT Disorders
- Hormones
- Dietary management of Certain diseases
- Neutraceuticals (Food Supplements)
- Parenteral Nutrition

#### **REFERENCE BOOKS:**

1. Pharmacology & Pharmacotherapeutics: R.S.Satoskar, S.D.Bhandarkar, Nirmala N.

#### Rege, 21st Edition

- 2. Essentials of Medical Pharmacology: K.D.Tripathi 6th edition
- 3. Clinical Pharmacology: Bennett & Brown 9th Edition
- 4. The Pharmacological Basis Of Therapeutics: Goodman & Gilman's, 12th Edition
- 5. Basic & Clinical Pharmacology : Bertram G. Katzung, Susan B. Master, Anthony J.

Trevor. 11th Edition.

No practical examination (exercise) for Paper I.

#### PAPER II: PUBLIC HEALTH, NUTRITIONAL PERSPECTIVES & FOOD SERVICE MANAGEMENT:

#### Course code: PGDCD:102

#### **Public Health**

#### **INTRODUCTION TO HEALTH:**

- Definition of health
- Determination of health
- Health Indicators of India
- Health team

#### **HEALTH POLICY & PROGRAMMES:**

- Concept
- National health policy
- National health pro-grammes (objectives & scope)
- Population of India & Family Welfare Pro gramme in India

#### **Nutritional Perspective**

#### **MALNUTRITION & NUTRITION PROGRAMMES:**

- PEM
- Assessment of Nutritional status

#### OBESITY & OVERWEIGHT AGEING & OSTEOPOROSIS NUTRITION FROM INFANTS TO ADULTHOOD NUTRITION IN PREGNANT & LACTATING WOMEN INTRODUCTION TO THERAPEUTIC DIETS FEEDING PATIENTS ROUTINE HOSPITAL DIETS

#### THERAPEUTIC ADAPTION OF NORMAL DIETS DIET COUNSELLING-

- Techniques
- Types
- Process
- Follow up
- Monitoring & Evaluation

#### **PRACTICALS:**

- 1. Measurement of Central tendency by using computer (Mean, Median, Mode) in favor of Medical History& general profile
- 2. Maintenance of patient records / history by different programmes (according to age groups, disease condition, community, income group & other factors)

3. Preparation of lists of food rich in protein ,fats, calories, fiber, sodium, calcium, phosphorus, oxalic acid in each food exchange

#### 4. Assessment of Nutritional Status

## FOOD SERVICE MANAGEMENT INTRODUCTION TO FOOD SERVICE SYSTEM:

- Non profit gaining organization
- Profit gaining organization
- laws governing food service establishment

#### FOOD MANAGEMENT:

- Characteristics of food
- Food Purchasing
- Receiving & storage of food
- Menu planning
- Food production
- Food Service
- Dish washing

#### FINANCIAL MANAGEMENT:

- Cost concepts
- Cost control
- Pricing
- Book keeping & Accounting(Computerized)

#### TOOLS OF MANAGEMENT

- The organisation chart
- Communication

#### PERSONNEL MANAGEMENT

- Developmental policies
- Recruitment ,selection & Induction
- Employee facilities & Benefits

#### • Training & Development SANITATION ,HYGIENE & SAFETY:

#### **PRACTICALS**:

- 1. Planning a menu for a establishment
- 2. Preparing Budget, Costing, Pricing
- 3. Preparing & Presentation of foods like salads ,soups,vegetables
- 4. Standardization of portion size for different food preparation

#### **REFERENCE BOOKS:**

- 1. Management of the child with a serious infection or severe malnutrition: WHO
- 2. Textbook of Preventive & social Medicine: K.Park
- 3. Nutrition Monitoring & Assessment: Tara Gopaldas & Subadra Seshadri
- 4. Menus for Low-cost balanced Diets & School lunch Programmes;NIN Hyderabad
- 5. Nutrient Requirements to Recommended Dietary Allowances for Indians: ICMR
- 6. Dietary Guidelines for Indians Foundations TO Nutrition & Health: NIN Hyderabad
- 7. Nutrition to Health :NIN Hyderabad
- 8. Understanding normal & clinical nutrition: Eleahor Noss Whitney, Corinne
- 9. Balog Cataldo, Sharon Rady Rolfes
- 10. Nutrition & Child care: Shanti gosh
- 11. Food Hygiene & Sanitation : S Roday
- 12. Catering Management An Integrated Approach: Mohini Sethi, Surjeet Malhan

#### PAPER III: CLINICAL DIEITICS

#### Course code: PGDCD-103

#### **Introduction to Medical Nutrition Therapy**

- Nutritional Management of Fever & Infection
- Nutritional Management of Critical care
- Nutritional Management of Stress
- Nutritional Management of Food Allergies & Food intolerance
- Nutritional Management of Cancer
- Nutritional Management of CHD
- Nutritional Management of Mtb disease 1) Gout 2) Diabetes
- Nutritional Management of Gastrointestinal Disease & disorders
- Nutritional Management of Liver
- Nutritional Management of Gall Bladder & Pancreatic Disease
- Nutritional Management of Renal Disease
- Nutritional Management of Neurological Disorders

#### **PRACTICALS:**

**1.** Case study presentation of <u>all the above conditions</u> which includes Personal history

medical History, Present Diagnosis, Treatment undertaken with laboratory reports, medicines/

drugs, Planning the menu for the same with monitoring & follow up of minimum Three days.

**2.** Preparing a Ready Reckoner with Food Exchange.

#### **REFERENCE BOOKS:**

- 1. Essentials Of Human Nutrition: K Majumdar
- 2. Be your own Doctor: Amm Wigmore D.D,N.D.
- 3. Personal Nutrition: Marie.A.Boyle
- 4. Clinical Dietitics & Nutrition: F.P.Antia & Abraham
- 5. Robinson's Normal & Therapeutic Nutrition: Corinne .H.Robinson
- 6. The management of Nutrition in Major Emergencies: W.H.O.
- 7. Nutrition in major Metabolic Diseases: C.Gopalan, Kamala Krishnaswamy
- 8. Nutrition & Child Development : K.E.Elizabeth
- 9. Nutrition Research in South East Asia: Dr.C.Gopalan

10. Eating Hints( Tips & Recipes for better cancer treatment): U.S.Department of Health & Human Services.