# **FACULTY OF SCIENCES**

# **SYLLABUS**

of

# POST GRADUATE DIPLOMA IN NUTRITION AND DIETETICS (Semester: I - II)

(Under Continuous Evaluation System)

Session: 2018-19



# **The Heritage Institution**

# KANYA MAHA VIDYALAYA JALANDHAR (Autonomous)

# PROGRAMME SPECIFIC OUTCOMES OF POST GRADUATE DIPLOMA IN NUTRITION AND DIETITICS (Session 2018-2019)

PSO1. To recognize different systems including cardiovascular, urinary system, digestive system in our body.

PSO2. Work and communicate with people who are vulnerable those who are able to have food at proper time and educate them about malnutrition, nutrition and benefits of current nutrition programmes run by government.

PSO3. To understand the issues regarding meal planning in hospital, its organization, management, personal management, principle resources and equipments used in catering industry.

PSO4. To understand the industrial hygiene, environment, sanitation, public health and to control of infection in catering establishment. To gain knowledge about microbiology bacterial food poisoning and food preservation.

PSO5. To understand the basic principle of therapeutic diets, different types of diets to be given in different diseases.

PSO6. To understand the concept of social welfare, its agencies and institution involved in social welfare.

# (Session 2018-2019)

# Scheme of Studies and Examination POST GRADUATE DIPLOMA IN NUTRITION AND DIETETICS

Semester I									
Course Code	Course Name	Course Type	Marks				Examination		
			Total	Ext.		CA	Examination time		
			- Juli	L	P		(in Hours)		
PNDL-1281	Physiology	C	50	40	-	10	3		
PNDL-1282	Community Nutrition (Th.)	C	75	60	-	15	3		
PNDP- 1283	Community Nutrition (Pr.)	С	50	-	40	10	3		
PNDL-1284	Institutional food administration (Th.)	С	75	60	-	15	3		
PNDP- 1285	Institutional food administration (Pr.)	C	50	-	40	10	3		
PNDL-1286	Basic Nutrition	D	40	40	-	-	3		
Total 300									

# (Session 2018-2019)

Semester II									
Course Code	Course Name	Course Type	Marks				Examination		
			Total	Ext.		CA	time		
				L	Р		(in Hours)		
PNDL- 2281	Hygiene and Food Microbiology	C	75	60	-	15	3		
PNDL- 2282	Diet Therapy and Applied Nutrition (Th.)	C	75	60	-	15	3		
PNDP- 2283	Diet Therapy and Applied Nutrition (Pr.)	C	50	-	40	10	3		
PNDL- 2284	Social Welfare	C	50	40	-	10	3		
PNDD- 2285	Project	С	50	-	40	10	3		
PNDM-2286	Meal Management	D	100	60	40	-	3		
Total 300									

D: Deficient paper

**Project:** Based on Diet Therapy and Community nutrition theory. Marks will be given by a panel of 4 experts.

**Internship**: Students are required to undergo 3 months training in a hospital. Completion certificate compulsory for obtaining PG Diploma

Students opting for P.G. Diploma in Nutrition & Dietetics with B.Sc. (Medical) to appear in deficient paper of Basic Nutrition as per syllabus attached with B.Sc. Part-I (of Basic Nutrition & Meal Management Clinical Nutrition n & Dietetics) & marks not be added to the P.G.

#### (Session 2018-2019)

# PHYSIOLOGY (Theory) COURSE CODE: PDNL – 1281

#### COURSE OUTCOMES

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge of cell structure and functions of inclusion bodies.

CO2. To understand the elementary knowledge of structure and functions of cardiovascular system.

CO3. To develop the knowledge of different types of endocrine glands and its functions.

CO4. To develop the knowledge about digestive system and its structure, function, digestion and absorption of carbohydrates, proteins and fats.

CO5. To develop the knowledge of structure and function of urinary system.

# (Session 2018-2019)

#### Physiology (Theory) COURSE CODE: PDNL - 1281

### **Time: 3 Hours**

Max. Marks: 50 Theory: 40 CA: 10

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D).Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

#### UNIT-I

Review of cell structure and functions of inclusion bodies. Physiology of lymphatic system Functions of lymphatic system: lymph nodes, vessels, spleen and thymus.

#### **Cardio Vascular System:**

Basic properties of the heart, cardiac output, blood pressure and factors affecting it and hypertension.

#### **UNIT-II**

#### **Physiology of Kidneys:**

Mechanism of urine formation and the role of the kidneys in water and electrolyte balance. **Physiology of nervous system** 

Structure and function of brain and spinal cord.

#### UNIT –III

#### Physiology of respiratory system

Knowledge of structure and function of respiratory organs.

#### Physiology of the digestive system:

Secretary and digestive function of the salivary glands, the stomach, the pancreas, the liver and intestine. Mechanism of absorption of carbohydrates, proteins and fats.

#### UNIT -IV

#### **Physiology of endocrine glands:**

Functions of the Thyroid, parathyroid, adrenal cortex, adrenal medulla, pancreas, pitutary.glands and different syndromes resulting from medules, hypo or hyperactuchy.

# Physiology of reproductive system

Knowledge of structure and function of male and female reproductive organs . Menstrual cycle.

#### **Books Recommended:**

- 1. Bloom, W. And Fawceitt, D.W.A. Text Book of Histology W.B.Saunders of Company, 1968.
- 2. Guyton, AC, Text Book of Medical Physiology W.B. Saunders & Company.
- 3. Strand, F.L. Modern Physiology. Macmillan Publication.
- 4. Davidson, B. And Smith E., Text Book of Physiology and Biochemistry, 1972.

### (Session 2018-2019)

# COMMUNITY NUTRITION (Theory) COURSE CODE: PNDL - 1282

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To understand the factors affecting food consumption and malnutrition.

CO2. To gain knowledge about agricultural production and socio- economic and psychological factors related to malnutrition and family size and composition.

CO3. To understand the measures to overcome malnutrition and to apply basic principle of nutrition to improve the dietary practices of community.

CO4. To gain knowledge about economic of sanitation of food nutrition.

CO5. To understand the national and international organization engaged in food and nutrition activity.

CO6. To understand the role of voluntary agencies their state programmes community development and extension programmes.

CO7. To understand the principles of planning, executing and evaluating the nutrition education programme.

# Post Graduate Diploma In Nutrition And Dietetics (Semester-1) (Session 2018-2019)

# Community Nutrition (Theory) COURSE CODE: PNDL - 1282

# **Time: 3 Hours**

Max. Marks:75 Theory: 60 CA: 15

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

# UNIT -I

Nutrition and National Development.

Major Nutritional Problem. Economic of Nutrition.

Factors Affecting Food Consumption, Malnutrition.

- Agricultural production and socio-economic and psychological factors related to malnutrition and family size and composition. Biology of malnutrition, dietary pattern, Food intake, food waste, custom habits prejudices and aversions, ignorance of nutritional needs.
- b) Measures to overcome malnutrition. Application of basic principles of nutrition to improve the dietary practices of communities. Needs for an integrated approach to solve problems of malnutrition. Increase in food production (green and white revolution) use of new unconventional foods.
- c) Nutrition adaptation.

Economic of sanitation of food nutrition – loss of food nutrients on contamination with chemical poisons, parasitic and microbial.

#### Health care system

# Health care service providers (primary, secondary and tertiary system)

# UNIT-II

Nutrition and infection.

National and international organization engaged in foods and nutrition activities.

- a) National: Role of voluntary agencies and state programmes. Community Development and extension programmes. State nutrition councils and bureaus, contribution of ministries of agriculture and health, ICMR, NIN, CSIR, CFTRI and ICAR.
- b) International: FAO, WHO, UNICEF.

### UNIT-III

Assessing the food and nutritional problems in the community. Methods for assessment of

- (c) Nutritional status of an individual and community:-
  - (a) Direct Assessment: Clinical sign, nutritional anthropometry, biochemical tests, and biophysical methods.
  - (b) Indirect Assessment: Vital statistics nutritionally relevant diseases, assessment of ecological survey, technique of diet and nutrition survey.

Objectives and operations of feeding programmes in the country:-

- (a) Pre-School feeding programmes.
- (b) School lunch programmes.
- (c) Programmes for other vulnerable sections of population.

### **UNIT-IV**

Nutrition Education: Study of existing daily dietary pattern in relation to socio-economic and Psychological aspects, importance of nutrition education for the community, technique, nutrition education through reading programmes. Training workers in nutrition education and feeding integration of nutrition education with extension work.

- Principles of planning, executing and evaluating the nutrition education programmes.
- Food Adulteration: Laws governing the food standards. Common methods of detecting food adulteration at home
- Current Nutrition Programmes Provision for nutrition in the IXth five years plan.

# (Post Graduate Diploma In Nutrition And Dietetics (Semester-1) (Session 2018-2019)

# COMMUNITY NUTRITION (Practical) COURSE CODE: PNDP -1283

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To understand the planning and conducting nutrition education programmes.

CO2. To develop the knowledge about standardization of cheap, nutritious recipes using food suitable for vulnerable groups.

C03. To enable them to conduct survey regarding vulnerable groups.

CO4. To understand the preparation of teaching aids for imparting nutrition education programmes.

(Session 2018-2019)

#### Community Nutrition (Practical) COURSE CODE: PNDP -1283

**Time: 3 Hours** 

Max. Marks: 50 Practical: 40 CA: 10

1. Planning and conducting nutrition education programmes (Project).

- 2. Evolving and standardization of cheap, nutrition recipes using various food suitable for vulnerable groups.
- 3. Surveys (class project).

4. Preparation and use of projected and non-projected teaching aids for imparting nutrition education programmes.

### **Books Recommended:**

- 1. Biology of Nutrition Elements 1972, Plenium Press.
- 2. Applied Nutrition Rajalakshmi R.
- 3. Nutrition in India Patwardhan V.N.
- 4. Nutrition and physical fitness Bougert L.J.
- 5. Nutrition evaluation of food processing, Roberts Haris, John Wiley and Sons, New Yorkand London.

### (Session 2018-2019)

# INSTITUTIONAL FOOD ADMINISTRATION (Theory) COURSE CODE: PNDL - 1284

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To review of different types of institutional food service operation – commercial and non – commercial.

CO2. To develop the knowledge about meal planning in institution, menu types types and standardization of common food preparation.

CO3. To understand the knowledge about management, organization and communication process and method.

CO4. To develop the knowledge about personnel management, methods of recruitment, welfare provision for employees- health, safety and recreation.

CO5. To understand the knowledge about types of equipment, kitchen unit, storage units, serving units and dishwashing.

# (Session 2018-2019)

# **Institutional Food Administration (Theory)**

# **COURSE CODE: PNDL - 1284**

# Time: 3 Hours

Max. Marks: 75 Theory:60 CA:15

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

# UNIT -I

1. Review of different types of institutional food service operation – Commercial and non-commercial.

2. **Meal Planning in Institution:** Basic factors in institutional meal planning. Menu types of service portion control. Maintenance of standard serving methods, techniques of preparation of food in large quantity, food habits, food costs, maintenance, use of waste foods. Standardisation of common food preparation.

#### UNIT -II

3. Organization: Theories of organization, different types.

4. **Management**: Definition and function. Tools of management – Organization chart, job analysis, job specification, job evaluation and worksheet, decision making, communication process and methods.

# UNIT-III

5. **Personnel Management**: Types of personnel required, personnel relationship, methods of recruitment, welfare provision for employees – health, safety, recreation. Meal of employees labour and food laws.

6. **Principle Resources**: Money – use of money, factors affecting cost control – cost concepts, types, element. Importance of cost control, methods of purchasing and requisition and inventory. Use of ledgers and basic knowledge of trading (profit and loss account and balance sheet).

# UNIT-IV

7. Physical Plant: Location floor plans space allowances, kitchen unit, storage units, serving unit and dish washing etc. work simplification.8. Equipment: Types of equipment criteria for their choice, efficiency in their operation and

care.

# (Session 2018-2019)

# INSTITUTIONAL FOOD ADMINISTRATION (Practical) COURSE CODE: PNDP- 1285

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To knowledge about preparation of recipes suitable for cafeteria.

CO2. To develop the knowledge about standardization and cost calculation of recipes selected for cafeteria.

CO3. To enhance the supervising quality of a student in which they have to plan cafeteria and calculate its cost.

### (Session 2018-2019)

#### **Institutional Food Administration**

# (Practical) COURSE CODE: PNDP- 1285

Time: 3 Hrs.

Marks: 50 Practical: 40 CA: 10

- i. Preparation of recipes suitable for Cafeteria.
- ii. Standardization and Cost calculation of recipes selected for Cafeteria.
- iii. Each student will run a Cafeteria and perform assigned duty in each cafeteria that will be evaluated. Manager will submit a report of each cafeteria.

**Note:** There will be no external exam. Each cafeteria and duty will carry marks and marks will be send by concerned teacher.

# (Session 2018-2019) Basic Nutrition COURSE CODE: PNDL-1286

# **COURSE OUTCOME**

CO(1) – To develop the knowledge about introduction to nutrition and storage methods of cereals, pulses, eggs, poultry, vegetables and fruit.

CO(2) – To distinguish between the different types of cooking methods- dry heat, moist heat, frying and microwave cooking.

CO(3) – To understand the knowledge about classification, functions and food sources, requirement, deficiencies of carbohydrates.

CO(4) – To develop the knowledge about classification. Food sources, functions and deficiencies of proteins, fats and oils.

CO(5) – To understand the knowledge about energy, food as a source of energy, the body need of energy.

# (Session 2018-2019) Basic Nutrition COURSE CODE: PNDL-1286

Time: 3 Hrs.

Marks: 40

### **Instructions for the Paper Setter:**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 8 marks.

# Contents

# Unit-I

Introduction to nutrition- Food as a sources of nutrients, functions of food, definition of nutrition, nutrients , adequate, optimum and good nutrition, malnutrition. Brief introduction of food commodities, their types, selection. Storage & Use: - cereals & pulses, eggs fish poultry, vegetable & fruit sugar, & mild, oil &

ghee, spice & condiments.

# Unit-II

Food Preparation

Basic terminology used in Cooking.

Different methods of cooking - Dry heat, moist heat, frying and microwave cooking. Effect of cooking on nutritive value of food.

# Unit-III

**Carbohydrates** - Composition, classification, functions, food sources, requirement, deficiencies.

**Fats and Oils-** Composition, Classification, Saturated, Unsaturated fatty acids, food sources, functions, requirement and deficiencies.

**Protein** - Composition, Classification, Essential and Non- essential amino acids, food Sources, functions, deficiencies.

# Unit-IV

Energy- Unit of energy, food as a source of energy, energy value of food. The body need of energy.

Factors affecting energy requirement

- 1. Determination of energy value of foods using calorimeter
- 2. Specific Dynamic action
- 3. Basal Metabolism
- 4. Determination of basal metabolism
- 5. Factors affecting the BMR

# **References:**

- 1. Guthrie, Hele, Andrews, Intoductory Nutrition, 6th ed. St. Louts, Times Mirror/MosbyCollege: 1988.
- 2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd ed.) Wilay Eastern Ltd. 1990.
- 3. Swaminathan S: Advanced text book on foods Nutrition, Vol. I, II (2nd ed. Revised &enlarged) B. app C-1985.
- 6. Willson, EVAD Principles of Nutrition 4thed New York John Willey & Sons. 1979.

#### (Session 2018-2019)

# HYGIENE AND FOOD MICROBIOLOGY (Theory) COURSE CODE : PNDL-2281

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To knowledge about brief introduction to industrial hygiene, sanitation, public health.

CO2. To knowledge about types of disinfection and different surfaces and materials.

CO3. To knowledge about brief history of microbiology and sub displicines of microbiology.

CO4. To develop the knowledge about harmful bacteria, methods of transmission and antimicrobiology agents : antibiotics, germicides.

CO5. To understand the knowledge about types of food spoilage and food preservation.

# Post Graduate Diploma In Nutrition And Dietetics (Semester-II) (Session 2018-2019) Hygiene and Food Microbiology (Theory) COURSE CODE : PNDL-2281

Time: 3 Hrs.

Max. Marks: 75 Theory:60 CA:15

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

#### **UNIT-I**

- 1. **Hygiene:** A brief introduction to industrial hygiene, environment, sanitation and public health.
- 2. Hygiene
  - a) Personal hygiene
  - b) Procedure of hand hygiene
  - c) Food hygiene (purchasing, preparation , cooking and serving).
- 3. Control of infection in catering establishment.
  - (a) Prevention of spread: Notification, isolation and quarantine.
  - (b) Immunity types and their effect.
  - (c) Disinfecting types of disinfection Concurrent and terminal : methods of disinfection and different surfaces and materials floor, walls, utensils, crockery, cutlery, clothing, wedding rooms, water closets, physical, chemical and mechanical methods.

#### UNIT-II

#### **Microbiology:**

- 1. Discovery and brief history of microbiology, sub disciplines of microbiology.
- 2. Ant microbiology Agents: Antibiotics, germicides, antiseptics, qualification of antimicrobial action.

#### **UNIT-III**

- 3. Sources of harmful bacteria and their methods of transmission.
  - (a) Bacterial food poisoning characteristics of bacteria, sources of infection in susceptible, food, sign and symptoms of the following:-Salmonella FP, Staphylococal FP, Clostridium perfirenges FP, Clostridium botulinum FP

#### **UNIT-IV**

4. General types of food spoilage and food preservation.

#### (Session 2018-2019)

# DIET THERAPY AND APPLIED NUTRITION (Theory) COURSE CODE: PNDL- 2282

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To knowledge about principles of therapeutic diets.

CO2. To develop the knowledge about diet in metabolic and chronic disorder – diabetes , gout, cardiovascular disease.

CO3. To develop the knowledge about nutrition and cancer.

CO4. To develop the knowledge about AIDS and skin disease.

CO5. To develop the knowledge about Drug – Nutrient interaction.

# (Session 2018-2019)

# Diet Therapy and Applied Nutrition (Theory) COURSE CODE: PNDL- 2282

#### Time: 3 Hrs.

Marks: 75 Theory:60 CA:15

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

#### UNIT -I

Drug – Nutrient interaction.

1. Principles of therapeutic diets.

- (a) Introduction Intravenous feeding, soft, liquid and post operative feedings. Modifications of Diet. Surgical conditions.
- (b) Diets in Fever and Infections–Types, metabolism in fevers, general dietary considerations. Diet in Typhoid , Tuberculosis
- (c) Calories Undernutrition, overnutrition.

# UNIT-II

Gastro intestinal diseases – Peptic ulcer spastic and stomic constipation, diarrhoeas, Ulcerative cotitis–symptoms and dietary treatment, Sprue-coeliac diseases, Lactose intolerance dietary treatment

Liver disease – jaundice, cirshosis and hepatic coma, gall bladder disease (cholecystites And chololithesis, and pancreatitis)

Kidney disease – Nephritis, nephrotic syndrome acute and chronic renal failure, Urinary calculi kidney failure and Dialysis

# UNIT-III

Chronic disorder like gout.

Cardiovascular disease – Hypertension and heart disease (Artherosclerosis, Hyperlipidemia) Elimination diets in allergy.

# UNIT-IV

**Diabetes:** 

# Definition of diabetes, Types of diabetes – Type 1, Type II, Prediabetes, Gestational Diabetes.

Risk factors for diabetes: primary and secondary risk factors Causes and symptoms of diabetes Insulin and its Types. Treatment plan for diabetes patient Nutrition and Cancer. Nutrition and AIDS and skin diseases.

#### (Session 2018-2019)

# DIET THERAPY AND APPLIED NUTRITION (Practical) COURSE CODE: PNDP-2283

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge about planning, preparation and serving diets for all the conditions.

CO2. To develop knowledge functioning of hospital in patient care and to plan diet for different patients.

CO3. To develop the knowledge of preparing innovative recipes for therapeutic conditions such as diabetes, hypertension.

#### (Session 2018-2019)

#### Diet Therapy and Applied Nutrition (Practical) COURSE CODE: PNDP--2283

#### Time : 3 Hrs

Marks: 50 Practical:40 CA:10

- 1. As related to theory planning preparation and serving diets for all the conditions mentioned in the theory keeping in mind the economic, regional and cultural factors. Family nutrition counseling.
- 2. Students are required to undergo 3 months training in a hospital certificate to be obtained from the hospital.
- 3. Innovation of at least 2 recopies for therapeutic conditions e.g. diabetes, hypertension etc.

#### **Books Recommended:**

- (i) Davidson and Passmor Human Nutrition and Dietetics.
- (ii) Whole and Good Heart Modern Nutrition in Health and Disease.
- (iii) Cooper, Barber and Micholl Nutrition in health and disease.
- (iv) Anita Nutrition in health and disease.

# (Session 2018-2019)

# SOCIAL WELFARE (Theory) COURSE CODE : PNDL -2284

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge about concept of social welfare.

CO2. To understand the knowledge about broad fields of social welfare, family and social welfare.

CO3. To distinguish social welfare from social work, social service, social reform and social action.

CO4. To develop the knowledge about social welfare agencies and institutions involved in social welfare.

CO5. To understand the knowledge about local organization, home science association of india, women voluntary service

#### (Session 2018-2019)

#### Social Welfare (Theory) COURSE CODE : PNDL -2284

Time: 3 Hrs.

Marks: 50 Theory:40 CA:10

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.

### UNIT -I

#### 1. Concept of Social Welfare:

- (a) Meaning, Importance.
- (b) Social welfare as distinguished from social work, social service, social reform and social action.

#### UNIT-II

- 2. Broad fields of social welfare.
  - (a) Family and child welfare
  - (b) Medical and psychiatric welfare
  - (c) Correctional service

### UNIT-III

#### 3. Social welfare agencies and institutions involved in social welfare :

- (a) Social welfare administration
- (b) Functioning of central and state government.
- (c) Ministries and departments of social welfare
- (d) Trends in social welfare administration
- (e) Central social welfare board
- (f) Kasturba Gandhi National Memorial Trust

#### **UNIT-IV**

- (g) Bhartiya Grameen Mahila Sangh
- (h) All India women's conference
- (i) Women's voluntary service
- (j) The all India conference of social work

- (k) The home science association of India
- () Local Organization Official and non-official, involved in social welfare.

# **Books for References:**

- 1. Clarke, Helen, Principles and Practices of Social work, Acolaton, Century-crofts, Ince,New York, 1947.
- 2. Young Husband, Eileon, Social work and Social Change, George Allan and Unwin Ltd., Ruskin House Museum Street, London, 1964.
- 3. Fariodlander, Walter, A Concept and Methods of Social Work, Prentice Hall of India (Pvt).Ltd., New Delhi, 1964.
- E. Wilson, Everett, E. and Convener, Merrill B. The Field of Social work, Henry Holt andCompany, New York, 1958.
  Nagnaul Hans, The study of India society. Social Optical Analysis of Social Welfare.

Nagpaul, Hans, The study of India society, Sociological Analysis of Social Welfare and Social Work Education, S. Chand and Co. Pvt. Ltd., New D

# (Session 2018-2019)

# PROJECT COURSE CODE : PNDD -2285

#### **COURSE OUTCOMES**

Upon Completion of this Course the student should be able to

CO1. To develop the knowledge about planning, preparation and serving diets for all the conditions.

CO2. To develop knowledge functioning of hospital in patient care and to plan diet for different patients.

CO3. To understand the planning and conducting nutrition education programmes.

CO4. To develop the knowledge about standardization of cheap, nutritious recipes using food suitable for vulnerable groups.

C05. To enable them to conduct survey regarding vulnerable groups.

CO6. To understand the preparation of teaching aids for imparting nutrition education programmes.

# (Session 2018-2019)

# Project

# **COURSE CODE : PNDD -2285**

Time : 3 Hrs

Total Marks: 50 Project : 40 CA: 10

Based on Diet Therapy and Community Nutrition Theory. Marks will be given by a panel of 4 experts.

# (Session 2018-2019)

#### MEAL MANAGEMENT

### (Theory)

# COURSE CODE: PNDM: 2286

#### **COURSE OUTCOME:-**

CO (1): To understand the concept of recommended dietary allowances, food groups, exchange list and balanced diet.

CO (2): To discuss principal of meal planning and nutritional requirements of men and women with different conditions

CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.

CO (4): To understand the nutritional requirement during infancy.

### (Session 2018-2019)

# Meal management COURSE CODE: PNDM -2286

Time: 3 Hrs.

Max. Marks: 100 Theory: 60 Practical:40

#### **Instructions for the Paper Setter**

- Eight questions of equal marks are to be set, two in each of the four Sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section.
- The fifth question may be attempted from any Section.
- Each question carry 12 marks.

### **Content:**

#### Unit-I

Balanced diet: Concept of Balanced Diet, Food Groups, Exchange Lists, Definition and Objectives of RDA, RDA for different age groups. (ICMR). Calorie consumption units in planning meals for a family.

#### Unit-II

Meal planning: Introduction and Principles of Meal planning.

# Unit-III

1. Physiological changes and nutritional requirement during pregnancy and lactation.

2. Growth & development and nutritional requirement during infancy breast feeding /vs bottle feeding and weaning.

#### Unit IV

3. Growth development, food habits and nutritional requirement of preschoolers, school going children & adolescent boy and girl.

- 4. Nutritional requirement for adult male & female, Sedentary, moderate & heavy worker.
- 5. Physiological changes during old age and meeting their nutritional requirements.

# **References:**

1. Guthrie, Hele, Andrews, Introductory Nutrition, 6th Ed, St. Louts, Times Mirror/Mosby College: 1988

2. Mudambi S.R. M.V. Rajgopal. Fundamental of Foods & Nutrition (2nd Ed.) Wilay Eastern Ltd. 1990.

3. Swaminathan S: Advanced Text Book on Foods Nutrition, Vol. I, II (2nd ed. Revised & enlarged) B. app C-1985 4. Willson, EVAD Principles of Nutrition 4th Ed, New York John Willey & Sons. 1979.

#### (Session 2019-2020)

#### Meal management (Practical)

# **COURSE CODE: PNDM -2286**

#### **COURSE OUTCOME:**

CO (1): To understand the concept of Standardize Proportion Size.

CO (2): To discuss meal planning and nutritional requirements of men and women with different conditions

CO (3): To get the insight of the concept growth and development of preschooler, school going children and adolescent boys and girls.

CO (4): To understand the nutritional requirement during infancy with their Calculations.

#### (Session 2019-2020)

### Meal management COURSE CODE: PNDM -2286

# Time: 3 Hrs.

Practical: 40

#### Note:

- Paper will be set on the spot by the examiner
- Planning of diet
- Cooking of 2 dishes from the diet plan
- Viva
- Files

1. Cook following dishes for different meals. Standardize portion size and calculate their nutritive value.

• Breakfast dishes- Stuffed Paranthas, Pancakes, Poha, Dalia etc.

• Lunch & Dinner dishes- Main Dishes- Dal, Channa, Rajmah, Koftas etc., Rice- Pulaos, Paneer dishes, Side dishes, Dry. Vegetables, Stuffed Vegetables etc. Dessert - Puddings, Kheer etc. Salads, Soups etc.

• Evening Sweet & Salty snacks - at least 5 each.

2. Plan balanced diet for the following age groups calculating calories, protein, one important vitamin and mineral as per requirement for the given age group.

(a) Infancy-Weaning foods

(b) pre-schooler

- (c) school going child.
- (d) adolescent girl and boy
- (e) adult male and female(sedentary moderate and heavy worker)

(f) Pregnant and lactating Women

(g) Geriatric