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Unit I: Definition and introduction to nutrition—good nutrition and malnutrition. Macro Nutrients - Classification, digestion, absorption, functions, dietary sources, RDA, clinical manifestations of deficiency and excess and storage in the body of the following in brief:
- Energy
- Carbohydrates, lipids and proteins

Unit II: Classification, digestion, absorption, functions, dietary sources, RDA, clinical manifestations of deficiency and excess of the following in brief:
- Fat soluble vitamins A, D, E, and K
- Water soluble vitamins - thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C
- Minerals - calcium, iron, iodine, fluorine and zinc

Unit III: Basal metabolism, factors affecting basal metabolic rate, calorigenic effect of food, specific dynamic action of food.


Unit V:
A) Interrelation between nutrients - nutrition and health - visible symptoms of good health.
B) Nutrition and Infection

PRACTICALS
1. Identification of nutrient rich sources of foods, their seasonal availability and price.
2. Study of nutrition labelling on selected foods.
3. List out low cost nutrient rich foods.
4. List out nutrient foods for different income groups.
REFERENCES


FIRST YEAR  
Semester -I  
BASIC NUTRITION 
Model Question Paper  

Time: 3 hrs.  
Max. Marks: 75  

Part-A  
Answer any FIVE questions.  

1. Write the classification of proteins.  
2. Define acid base balance and how it is maintained in the body.  
3. Write the functions of carbohydrates.  
4. Discuss the role of vitamin-A.  
5. What are the visible symptoms of good health.  
6. What are the functions of lipids.  
7. Discuss the functions of B-complex vitamins in the body.  
8. What about the dietary sources and recommend dietary allowance of calcium for different age groups.  

Part-B  
Answer any FIVE questions.  

1. Give the relation between nutrition and infection.  
2. What is BMR? What are the factors affect BMR.  
3. Importance of water and water balance in the body.  
4. Write in detail about flourine.  
5. What do you know about Iron.  
6. Discuss the interrelationship of the nutrients.  
7. Write about the functions and sources of Iodine.  
8. What are the dietary sources and functions of zinc.
FIRST YEAR  
Semester-II  PAPER - II  
Introduction to Food Science

THEORY

Unit I  :  A) Foods-Definition and objectives in the study of foods. 
B) Relation to nutrition and function of foods.  
C) ICMR food group classification 
D) Cereals and millets-structure, composition and nutritive value, processing, use in variety of preparations, selections, nutritional aspects and cost.

Unit II  :  A) Pulses and legumes: Composition and nutritive value, production, selection and variety, storage and processing. 
B) Vegetables and fruits: Classification, nutritional aspect, pigments present, enzyme browning.

Unit III  :  A) Milk and Milk products: nutritive value, use in cookery 
B) Meat, fish, poultry and eggs: nutritive value, use in cookery 
C) Nuts and oils seeds: nutritive value, use in cookery 
D) Spices and condiments: nutritive value, use in cookery 
E) Beverages

Unit IV  :  A) Food preservation-methods, techniques, principles and their applications-high temperature, low temperature, removal of moisture, irradiation and preservatives. 
B) Multi purpose foods, dehydrated foods, frozen foods, ready mixers. 
C) Food spoilage 
D) Improving nutritional quality of foods: Germination, Fermentation, Supplementation, Substitution, Fortification and enrichment

Unit V  :  Food Sanitation and hygiene 
A) Control and inspection 
B) Planning and implementation of training program for health personal.
PRACTICALS

1. Standardization of weights and measures of various food items.
2. Cereals and pulse preparation.
   B) Vegetable preparation.
   D) Breakfast and snack preparations.
   E) Milk preparation
   F) Soups
   G) Bakery preparation
   H) Beverages
   J) Egg, fish and meat preparations

REFERENCES

FIRST YEAR
Semester -II
INTRODUCTION TO FOOD SCIENCE
Model Question Paper

Time: 3 hrs.  Max. Marks: 75

Part-A
Answer any FIVE questions.

1. What are basic five food groups? How do you use the food guide.
2. Describe the preparation and advantages of parboiled rice.
3. What is enzymatic browning? What measures would you take to prevent it?
4. What are the natural toxins present in pulses?
5. Explain lathyris.
6. What is the significance of spices in cooking.
7. Explain the composition of milk.
8. What are multipurpose foods and their importance.

Part-B
Answer any FIVE questions.

1. Describe the various types of milk and milk products available in the market.
2. Classify beverages. What are the points to be considered while preparing and serving beverages.
3. Discuss the factors responsible for food selection.
4. Discuss the nutritive value of nuts and oil seeds.
5. Draw the diagram of egg and explain its role in cookery.
6. Describe various methods of preserving food.
7. Write the classification of foods and explain about basic five.
8. How do you alter the tenderness of meat.
THEORY


Unit II  a. Lactation – Physiology of lactation-nutritional needs, feeding the baby.
   c. Nutrition in preschool age-physiological development and food intake, development of food habits, diet plan.

Unit III : Nutrition of school children and adolescence – Growth and Nutrient needs and requirements – Food choices – Eating habits, Importance of snacks, traditions foods and regional dietary patterns.

Unit IV : Adult – Reference man – Reference women – Nutrient needs and Requirements during various physical activity (Sedentary, Moderate and Heavy work), diet and life style related diseases and their prevention.

Unit V : Geriatric Nutrition – Factors affecting food intake and nutrient use – Nutrient needs – Nutrition related problems, physiological changes in elderly, nutritional and health concerns in old age and their management.
PRACTICALS

1. Planning and preparation of a balanced diet for pregnant women.
2. Planning and preparation of a balanced diet for a Nursing Mother.
3. Planning and preparation of a balanced diet for a Pre School Child.
4. Planning and preparation of a balanced diet during Adolescence.
5. Planning and preparation of a balanced diet for adult man and women during different physical activities-sedentary, moderate, heavy worker.
6. Planning and preparation of a balanced diet for elderly.

REFERENCES

SECOND YEAR  
III Semester  
FAMILY NUTRITION  
Model Question Paper

Time: 3 hrs.  

Max. Marks: 75

Part-A  
Answer any FIVE questions.  
5x5=25

1. Why lactating mother needs more nutrients? Discuss?
2. Define adolescence what are the likes and dislikes?
3. What are old age problems?
4. What care will you take while planning a diet for a pre-school child?
5. Discuss the importance of breast feeding and suggest your comments.
6. Who is reference man and women? How do you suggest nutrient requirements for human body?
7. A balanced diet during pregnancy helps to produce better baby. Discuss.
8. Write about importance of snacks.

Part-B  
Answer any FIVE questions.  
5x10=50

1. Explain the physiological changes of pregnancy and complications?
2. Write about the nutrient requirements during adolescents.
3. Stated the need for inducing meaning food to a infant and give examples for liquid, semi solid and solid weaning foods.
4. Write about RDA and nutrition for sedentary women.
5. Why calories are not required more in aged people? Prescribe a diet.
6. What are different ways by which you can improve the nutritive value of foods? Discuss with examples.
7. Write briefly on the importance of supplementary foods.
8. Write about RDA and nutrition for heavy work man.
SECOND YEAR
SEMESTER - IV PAPER - 4
COMMUNITY NUTRITION

THEORY

Theory: 4 hrs/week
practicals: 3hrs/week

Unit I: Assessment - Nutritional status of the community
Anthropometry.

Unit II: Diet surveys and clinical assessment of nutritional
status - clinical examination of signs, dietary analysis.

Unit III:

a. Biochemical assessment of nutritional status
   Prevention and cure.
   b. Indirect methods - vital health statistics.
   c. Functional foods and its role
   i. Phytochemicals, sources, benefits and its function.
   2. Food Adulteration - Adulteration in different foods, their harmful effects, prevention - food
   adulteration act - food standards - ISI, Agmark.

Unit IV:

a. National, International programmes related to
nutrition a) ICDS - Supplementary feeding
programmes - Special nutrition programmes
(SNP) - Prophylactic programmes - Vitamin-A,
Iron, Iodine etc. b)Role of National and
international agencies - WHO, FAO, CARE,
UNICEF, ICMR etc.

b. Nutrition programmes for improving nutrition
   and health standards - feeding and nutrition
   education programmes.

Unit V: Nutritional problems prevalent in India - Under
nutrition, Malnutrition and Over nutrition - Deficiency
diseases of vitamins and minerals with special reference
to protein energy malnutrition, Anaemia, Vitamin-A,
Iodine deficiency and B-complex deficiencies -
Functional consequences.
PRATICALS

1. Diet and Nutrition surveys
2. Identifying vulnerable at risk groups
3. Breast feeding and weaning practices of specific groups.
4. Use of Anthropometric measurements in assessing the nutritional status.
5. Observation of mid day programme at Anganwadi Center.
6. Observation and Planning of School Lunch Programmes.
7. Planning and preparation of recipes for 15 members or more.

REFERENCES

SECOND YEAR
Semester-IV  PAPER - IV
COMMUNITY NUTRITION
Model Question Paper

Time: 3 hrs.  Max. Marks: 75

Part-A
Answer any FIVE questions.  5x5=25

1. How do you assess the growth of pre-school children with growth chart?
2. Explain school lunch programmes in brief?
3. Write about integrated child development service scheme?
4. Write about anaemia and its preventive measures?
5. Write about kwashiorkor and marasmus.
6. List the common nutritional deficiency diseases prevalent in out country?
7. Expand WHO and UNICEF and write about them.
8. Write about Anaemia and preventive measures.

Part-B
Answer any FIVE questions.  5x10=50

1. Explain about vitamin A deficiency diseases?
2. How do you assess the nutrition of children and adults with Anthropometry.
3. What is meant by prophylaxis programmes? Discuss various prophylaxis programmes in brief.
4. Discuss the role played by national agents in improving the nutritional status of the population in your state.
5. Define nutritional status. Write on clinical examination techniques used to assess nutritional status of a community.
6. Write about diet surveys.
7. Write about the B complex deficiency disease in brief.
8. Write about international programmes related to nutrition.
THIRD YEAR
Semester-V  PAPER - 5
DIET THERAPY-I

THEORY

Unit I : Purpose and principles and classification of Therapeutic diets, modifications of normal diet – liquid diet – semi solid diet etc.,

Unit II : Diet in fevers and infections Types, metabolism in fevers, general dietary considerations, diet in influence, typhoid fever, recurrent malaria and Tuberculosis.

Unit III : Diet in GI tract diseases:
(a) Diet in gastritis, peptic ulcer (gastric and duodenal). Etiology, symptoms and clinical findings, treatment, dietary principles, and modifications. 
(b) Diarrhoea (child and adult), classification, modification of diet.
* Constipation, dietary considerations
* Ulcerative colitis (adult) symptoms
* Sprue, dietary treatment

Unit IV : Diet in disease of the liver, gall bladder and pancreas. Etiology, symptoms and dietary treatment in Jaundice, hepatitis, cirrhosis, of liver and hepatic coma. Dietary treatment in cholecystitis and pancreatitis.

Unit V : * Nutrition in injury, burns and surgery.
* Diet in allergy and skin disturbances: Definition, classification, manifestations, common food allergies, tests and dietetic treatment.
* Nutritional management in cancer.
PRACTICALS

1. Planning and preparation of diets with modified consistency —
   liquid, soft diet,
2. Planning and preparation of diets for GI tract diseases — Diarrhoea.
3. Planning and preparation of diets for GI tract diseases — Constipation.
4. Planning and preparation of diets for GI tract diseases — Peptic ulcer.
5. Planning and preparation of diet in fevers and infections.
6. Planning and preparation of diet in Jaundice and Cirrhosis of liver.

REFERENCES

THIRD YEAR
Semester-V  PAPER - V
DIET THERAPY-I
Model Question Paper

Time: 3 hrs.  Max. Marks: 75

Part-A
Answer any FIVE questions.

1. Classify fevers and explain tuberculosis disease and diet?
2. Write about the diet in allergy and skin disturbances?
3. Define liver cirrhosis. Prescribe the condition and dietary treatment?
4. Write about the function of liver?
5. What is Therapeutic diet? What are the changes made in therapeutic diets?
6. Principles and classification of therapeutic diets?
8. Write short notes on diarrhoea.

5x5=25

Part-B
Answer any FIVE questions.

1. Narrate the condition of gastro intestinal tract and role of the diet in it?
2. Describe Cholecystitis and pancreatitis. What are the dietary restrictions you suggest during this condition.
3. What are the functions of liver and the agents which are responsible for liver damage.
4. Write about the change of normal diet in to soft and semi-solid diet.
5. Write about the diet you prescribe in gastritis.
6. Write about the metabolism in fevers.
7. Write about the etiology, symptoms and diet treatment in Jaundice.
8. Define ulcer. Write symptoms, diagnosis and dietary management.

5x10=50
THIRD YEAR

Semester VI PAPER – VI

DIET THERAPY-II

THEORY

Unit I : Disorders of Metabolism.
   (a) Diabetes Mellitus
   * Incidence and predisposing factors.
   * Symptoms, types and tests for detection
     (Diagnosis)
   * Dietary treatment, meal management and
     Complications

Unit II : (a) Obesity and leanness: causes, complications and
         health effects, dietary treatment and other
         recommendations.
         (b) Anaemia, PEM

Unit III : Diet in Cardiovascular diseases.
         Coronary heart disease – incidence, pathology and
         dietary management, prophylactic role of diet.
         Hypertension – Dietary management.

Unit IV : Diet in renal diseases.
         acute and chronic glomerulonephritis, nephrosis, renal
         failure, urinary calculi – causes, treatment, acid and
         alkali producing and neutral foods and dietary treatment.

Unit V : Diet counselling:
   (a) Nutritional assessment of patients, dietary
       prescription and counselling follow up, patient education
       and diet.
   (b) Role of dietitian: Definition of nutritional care,
       interpersonal relationship other patient, planning and
       implementing dietary care, their approach to nutritional
       care.
PRACTICALS
1. Planning and preparation of diets for diabetics.
2. Planning and preparation of diet in obesity.
3. Planning and preparation of diet in deficiency disease –
   Kwashiorkar
4. Planning and preparation of diet in Anaemia.
5. Planning and preparation of diet in cardiovascular diseases.
6. Planning and preparation of diet in hypertension.
7. Planning and preparation of diet in renal diseases.

REFERENCES
THIRD YEAR
Semester-VI  PAPER - VI
DIET THERAPY-II
Model Question Paper

Time: 3 hrs.  Max. Marks: 75

Part-A
Answer any FIVE questions.  5x5=25

1. Write short note on LDL and HDL cholesterol?
2. Define hypertension. Write the causes and diet?
3. Explain the dietary modifications for treatment of urinary calculi?
4. Explain type II diabetes and the role of insulins in controlling it?
5. What is Therapeutic diet? What are the changes made in therapeutic diets?
6. Write about the importance of fibre in our diet?
8. Explain the importance of diet counselling.

Part-B
Answer any FIVE questions.  5x10=50

1. Narrate the condition of coronary heart disease and role of the diet in it?
2. Describe chronic Glomerulonephritis. What are the dietary restrictions you suggest during this condition.
3. Write about the role and responsibilities of dietitian.
5. What is PEM? Explain the role of nutrition education in preventing malnutrition.
6. What are complications of obesity.
7. Write about the incidence, symptoms and types of diabetes.
8. Write about the complications of diabetes.