

SRI VENKATESWARA UNIVERSITY
DEPARTMENT OF HOME SCIENCE
CHOICE BASED CREDIT SYSTEM (C.B.C.S) SYLLABUS AND SCHEME OF EXAMINATION
(WITH EFFECT FROM THE ACADEMIC YEAR 2015 -2016)

B. Sc.CBCN

Course :B.Sc

Subject : Clinical Nutrition and Dietetic

Semester	Part	Course Code	Course	No. of Hours		Credits	IA	ES	Total Marks (100)	
				T	P					
FIRST YEAR										
Semester I	Part 1		Language 1	4	0	4	25	75	100	
			Language 2	4	0	4	25	75	100	
	SK/FC		Fundamentals of Communication Skills	1	2	2	25	25	50	
			Indian Heritage and Culture	1	2	2	25	25	50	
	Part 2	Paper CN 101		Basic Nutrition	4	-	4	25	75	100
				Basic Nutrition	-	3	2	-	50	50
		Paper CN 102		Biochemistry I	4	-	4	25	75	100
				Biochemistry I Practicals	-	3	2	-	50	50
		Paper CN 103		Chemistry I	4	-	4	25	75	100
				Chemistry I Practicals	-	3	2	-	50	50
	Total Marks				22	13	30			750
	Semester II	Part 1		Language 1	4	0	4	25	75	100
Language 2				4	0	4	25	75	100	
SK/FC			Building Vocabulary	1	2	2	25	25	50	
			Professional Life Skills - I	1	2	2	25	25	50	
Part 2		Paper CN 201		Introduction to food science	4	-	4	25	75	100
				Introduction to food science	-	3	2	-	50	50
		Paper CN 202		Biochemistry II	4	-	4	25	75	100
				Biochemistry II Practicals	-	3	2	-	50	50
		Paper CN 203		Chemistry II	4	-	4	25	75	100
				Chemistry II Practicals	-	3	2	-	50	50
Total Marks				22	13	30			750	
SECOND YEAR										
Semester III	Part 1		Language 1	4	0	4	25	75	100	
			Language 2	4	0	4	25	75	100	
	SK/FC		Communication Practice - I	1	2	2	25	25	50	
			Human Values and Ethics	1	2	2	25	25	50	
	Part 2	Paper CN	Family Nutrition	4	-	4	25	75	100	

		301	Family Nutrition	-	3	2	-	50	50
		Paper CN 302	Biochemistry III	4	-	4	25	75	100
			Biochemistry III Practicals	-	3	2	-	50	50
		Paper CN 303	ChemistryIII	4	-	4	25	75	100
			ChemistryIIIPracticals	-	3	2	-	50	50
			Total Marks	22	13	30			750
Semeste r IV	Part 1		Language 1	4	0	4	25	75	100
			Language 2	4	0	4	25	75	100
	SK/FC		Communication Practice - II	1	2	2	25	25	50
			Professional Life Skills - II	1	2	2	25	25	50
	Part 2	Paper CN 401	Community Nutrition	4	-	4	25	75	100
			Community Nutrition	-	3	2	-	50	50
		Paper CN 402	Biochemistry IV	4	-	4	25	75	100
			Biochemistry IV Practicals	-	3	2	-	50	50
		Paper CN 403	Chemistry IV	4	-	4	25	75	100
			Chemistry IV Practicals	-	3	2	-	50	50
			Total Marks	22	13	30			750
THIRD YEAR									
Semeste r V	Part 2	Paper CN 501	Diet Therapy I	4	-	4	25	75	100
		Paper CN 502	Quantity Food Production & Service	4	-	4	25	75	100
			Practical for 501 & 502	-	03	02	50	50	100
		Paper CN 503	Bio Chemistry V	4	-	4	25	75	100
		Paper CN 504	Bio Chemistry VI	4	-	4	25	75	100
			Practical for 503& 504	-	4	3	50	50	100
		Paper CN 505	Chemistry V	4	-	4	25	75	100
		Paper CN 506	Chemistry VI	4	-	4	25	75	100
			Practical for 505 & 506	-	4	3	50	50	100
	FC		Environmental Studies	1	2	2	25	25	50
			Total Marks	25	14	35			950
Semeste r VI	Part 2	Paper CN 601	Diet therapy II	4	-	4	25	75	100
		Paper CN	Food Service Management	4	-	4	25	75	100

		602							
			Practical for 601 & 602	-	3	2	50	50	100
		Paper CN 603	Bio Chemistry VII	4	-	4	25	75	100
		Paper CN 604	Bio Chemistry VIII	4	-	4	25	75	100
			Practical 603 + 604	-	03	02	50	50	100
		Paper CN 605	Chemistry VII	04	-	04	25	75	100
			Chemistry	-	03	02	-	50	50
		Paper CN 606	Chemistry VIII	04	-	04	25	75	100
			Chemistry	-	03	02	25	50	75
	SK		Communication Practice – III (Writing Skills)	1	2	2	25	25	50
			Total Marks	25	17	36			950
			Grand Total	138	83	191			4900

1st year – I Semester
Paper CN 101- Basic Nutrition

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

- Unit I : Definition and introduction to nutrition-good nutrition and mal nutrition 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: (15credits)
- 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: (18credits)
- 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 : A) Energy value of foods and energy requirement – the body's for energy BMR activities, utilization of food to energy requirements. (12credits)
- B) Basal metabolism, factors affecting basal metabolic rate, calorogenic effect of food, specific dynamic action of food.
- C) Acid base balance.
- Unit IV : Importance of water and water balance – functions, sources, requirement – effect of deficiency. (13credits)
- Unit V : A) Interrelation between nutrients – nutrition and health – visible symptoms of good health.
- B) Nutrition and Infection (2credits)

Practicals

Credits

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

REFERENCES

1. Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
2. Wardlaw MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition Mosby
3. Swaminadhan S, Advanced Text book on foods & nutrition, Vol. I&II (2nd revised and enlarge) Rappc. 1985.
4. VijayaKhader, Food, nutrition & health, Kalyan Publishers, 2000.

I year II Semester
Paper CN 101 – BASIC NUTRITION
Model Question Paper

Time: 3 hrs.

Max. Marks: 75

Part-A

Answer any FIVE questions.

5x5=25

1. Write the classification of proteins.
2. Importance of water and water balance in the body.
3. Write the functions of carbohydrates.
4. What are the dietary sources and functions of zinc?
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.

5x10=50

1. a) Give the relation between nutrition and infection.
 (Or)
 b) Discuss the interrelationship of the nutrients.
2. a) What is BMR? What are the factors affect BMR.
 (Or)
 b) Define acid base balance and how it is maintained in the body.
3. a) Write in detail about fluorine.
 (Or)
 b) Write about the functions and sources of Iodine.
4. a) Write about digestion, absorption, functions and dietary sources of vitamin-A.
 (Or)
 b) Write about digestion, absorption, functions and dietary sources of Vitamin-C.
5. a) What is malnutrition and give clinical manifestations of macronutrients.
 (Or)
 b) Define energy. Explain about energy giving foods and give RDA for different age groups.

1st year – II Semester

Paper CN 201 - Introduction to Food Science

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

- | | | |
|----------|--|-------------|
| Unit I | <ul style="list-style-type: none"> : 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. | (15credits) |
| Unit II | <ul style="list-style-type: none"> : 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. | (10credits) |
| Unit III | <ul style="list-style-type: none"> : 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 | (12credits) |
| Unit IV | <ul style="list-style-type: none"> : 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 | (14credits) |
| Unit V | <ul style="list-style-type: none"> : Food Sanitation and hygiene A) Control and inspection B) Planning and implementation of training program for health personal. | (9credits) |

Practicals

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

REFERENCES

1. Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
2. Srilakshmi (2010). Food Science, 5th Edition. New Age International Ltd.
3. Wardlaw MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition, Mosby.

I year II Semester
Paper CN 201 – INTRODUCTION TO FOOD SCIENCE
Model Question Paper

Time: 3 hrs.

Max. Marks: 75

Part-A

Answer any FIVE questions.

5x5=25

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 lathyrism.
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.

5x10=50

1. a) Describe the various types of milk and milk products available in the market.
(Or)
b) Milk is a complete food discuss.
2. a) Discuss the nutritive value of nuts and oil seeds.
(Or)
b) Write different uses of nuts and oil seeds.
3. a) Draw the diagram of egg and explain its role in cookery.
(Or)
b) Write about selection of fresh egg and discuss egg processing methods.
4. a) Describe various methods of preserving food.
(Or)
b) Discuss the internal and external factors effect on nutritive value of foods.
5. a) How do you alter the tenderness of meat?
(Or)
b) Write changes during while cooking of meat.

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

- Unit I : a. Principles of meal planning – balanced diet, dietary guidelines for Indians, food exchange lists. (10credits)
- b. Nutrition in pregnancy – Physiological changes and complications.
- Unit II : a. Lactation – Physiology of lactation-nutritional needs, feeding the baby. (15credits)
- b. Nutrition during Infancy – Growth and Development – Requirements – Nutrient needs - Breast feeding, weaning – Introduction to Supplementary foods – Feeding pattern.
- c. Nutrition in preschool age-physiological development and food intake, development of food habits, diet plan.
- Unit III : Nutrition of school children and adolescence – (15credits)
- 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 – (12credits)
- 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 (8credits)
- and nutrient use – Nutrient needs – Nutrition related problems, physiological changes in elderly, nutritional and health concerns in old age and their management.

PRACTICALS**Credits**

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

REFERENCES

1. Srilakshmi, B., Dietetics, New Age International (P) Ltd., 2000.
2. Swaminadhan, M., 1988, Essentials of Food and Nutrition, Volume I and II, TheBangalore Printing and Publishing Co. Ltd., Bangalore.
3. Guthrie Helen A. and Mary Frances Picciano, 1999, Human Nutrition, WCB Mc. GrawHill, Boston.

I Year III Semester
Paper CN 301 – 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. What is balanced diet? Discuss.
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. a) Explain the physiological changes of pregnancy and complications?
 (Or)
 b) Write about Principles of meal planning
2. a) Write about the nutrient requirements for School children.
 (Or)
 b) Define adolescence and state the Food choices – Eating habits of adolescents.
3. a) Stated the need for inducing weaning food to a infant and give examples for liquid, semi solid and solid weaning foods.
 (Or)
 b) Write RDA and diet plan for lactating mother
4. a) Write about RDA and nutrition for sedentary women (0-6 months).
 (Or)

- b) Write about RDA and nutrition for heavy work man.
5. a) Why calories are not required more in aged people?
Prescribe a diet.

(Or)

- b) Discuss the nutritional and health concerns in old age
and their management.

II year – IV Semester

PAPER-CN 401-COMMUNITY NUTRITION

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

- Unit I : Assessment – Nutritional status of the community – (10credits)
Anthropometry.
- Unit II : Diet surveys and clinical assessment of nutritional (10credits)
status – clinical examination of signs, dietary
analysis.
- Unit III : a. Biochemical assessment of nutritional status (12credits)
– Prevention and cure.
b. Indirect methods – vital health statistics.
c. Functional foods and its role
1. Phytochemicals, sources, benefits and its
function.
2. Food Adultration – Adultration in different
foods, their harmful effects, prevention – food
adultration act – food standards – ISI, Agmark.
- Unit IV : a. National, International programmes related (15credits)
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 (12credits)
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**credits**

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

REFERENCES

1. Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
2. Wardlaw MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition, Mosby
3. Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.
4. NIN, ICMR (1990). Nutritive Value of Indian Foods.
5. Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation: A Complete Manual, Fourth Edition. Orient Black Swan Ltd.
6. Seth V, Singh K (2005). Diet planning through the Life Cycle: Part 1. Normal Nutrition. A Practical Manual, Fourth edition, Elite Publishing House Pvt Ltd.
7. Srilakahsmi, B., Dietetics, New Age International (P) Ltd., 2000.
8. Swaminadhan, M., 1988, Essentials of Food and Nutrition, Volume I and II, TheBangalore Printing and Publishing Co. Ltd., Bangalore.

II year IV Semester
Paper CN 401 – 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 our 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. a) Explain about vitamin A deficiency diseases?
 (Or)
 b) Classify vitamins and write about the B complex deficiency disease in brief.
2. a) What is meant by prophylaxis programmes? Discuss various prophylaxis programmes in brief.
 (Or)
 b) Discuss the role played by national agencies in improving the nutritional status of the population in your state.
3. a) Define nutritional status. Write on clinical examination techniques used to assess nutritional status of a community.
 (Or)
 b) Write about diet surveys.
4. a) Write about Food Adulteration – Adulteration in different foods, their harmful effects,
 (Or)
 b) Discuss the Phytochemicals, and their sources, benefits and its function.
5. a) How do you assess the nutrition adults with Anthropometry?

(Or)

b) What are the anthropometric methods and techniques used to assess the nutritional status of a child?

III year – V Semester
Paper CN 501DIET THERAPY-I

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

- Unit I : Purpose and principles and classification of Therapeutic diets, modifications of normal diet – liquid diet – semi solid diet etc., (12credits)
- Unit II : Diet in fevers and infections Types, metabolism in fevers, general dietary considerations, diet in influence, typhoid fever, recurrent malaria and Tuberculosis. (10credits)
- Unit III : Diet in GI tract diseases: (12credits)
- (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 pancrease. (14credits)
- Etiology, symptoms and dietary treatment in Jaundice, hepatitis, chrholds, of liver and hepatic coma.
- Dietary treatment in cholestitis and pancreatitis.
- Unit V : * Nutrition in injury, burns and surgery. (10credits)
- * Diet in allergy and skin disturbances: Definition, classification, manifestations, common food allergies, tests and dietetic treatment.
 - * Nutritional management in cancer.

Practicals**credits**

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

REFERENCES

1. Antia, F.P., Clinical Dietetics and Nutrition, 3rd ed. Oxford University Press, Bombay, 1989.
2. Passmore, P. and Eastwood, M.A., Human Nutrition and Dietetics, 8thed, ELBS, Churchill, Livingstone, 1986.
3. Swaminathan, M., Dietetics, The Bangalore Printing & Publishing Co. Ltd., Bangalore, 1980.
4. Sri Lakshmi, B., 2005, Dietetics, New Age International (P) Ltd., Publishers, New Delhi.

**III year – V Semester
Paper CN 501 -DIET THERAPY-I
Model Question Paper**

Time: 3 hrs.

Max. Marks: 75

Part-A

Answer any FIVE questions.

5x5=25

1. Describe Cholystitis and pancreatitis. What are the dietary restrictions you suggest during this condition?
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. Classification of diarrhoea and suggest a diarrhoeal diet for child.
7. How do you prevent constipation? Plan a diet.
8. Write short notes on sprue.

Part-B

Answer any FIVE questions.

5x10=50

1. a) Narrate the condition of gastro intestinal tract and role of the diet in it?

(Or)

b) Define ulcer. Write symptoms, diagnosis and dietary management.

2. a) What are the functions of liver and the agents which are responsible for liver damage.

(Or)

b) Write about the etiology, symptoms and diet treatment in Jaundice.

3. a) Write about the change of normal diet in to soft and semi-solid diet.

(Or)

b) Principles and classification of therapeutic diet.

4. a) Nutritional management in cancer.

(Or)

b) Nutrition in injury, burns and surgery.

5. a) Write about the metabolism in fevers.

(Or)

b) Classify fevers and explain tuberculosis disease and diet?

III year – V Semester

Paper CN 502 :QUANTITY FOOD PRODUCTION & SERVICE

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

- Unit I : Food Service in institutions – General factors to be considered – Kitchen Layout: Size of Kitchen, Types of Kitchen – Hospitals – Institutions. (12credits)
- Unit II : Book – Keeping and Accounting: (12credits)

Book – keeping: System of book keeping : Advantages of the double entry system: Books of account :
- Unit III : The types of cash books: Posting of the cash Book: Purchases book: Sales book; Purchases returns book: Journal, Entries of transactions; maintaining a complete set of books; restaurant books; trail balance: Profit and loss account. (12credits)
- Unit IV : Equipment for food preparation and service. (12credits)
Classification and selection of equipment. Care and maintenance of equipment.
- Unit V : Food cost control: Factors responsible for losses: lack of proper supervision at the point of receiving food from suppliers: Methods of controlling food costs: kitchen calculations and cost statements. (12credits)

Practicals**credits**

- | | | |
|----|--|---|
| 1. | Planning physical layouts of food service institutions, commercial, non-commercial, school feeding, ICDS etc., | 3 |
| 2. | Visits to dietetic departments in hospitals. | 2 |
| 3. | Quantity Food Production & Purchase and sale by the students. | 3 |
| 4. | Visit to Mid day Meal Programmes and observation of food service. | 2 |
| 5. | Visit to a Hospital department (A project report after the field placement) | 2 |

REFERENCES

1. MohiniSethi and SurjeetMolhan Catering Management – An Integrated Approach, Wiley Eastern Ltd., 1987.
2. The Complete Book of Cooking Equipment Jules Wilkinson, 2nd edition, A CBI Book, Published by Reinhold Company, 1981.
3. Design and Layout of Food Service Facilities, John C. Birchfield endorsed by the Food Service Consultants Society International 1988 by Van Nostrand Reinhold, 1981.

III year – V Semester

Paper CN 502 – QUANTITY FOOD PRODUCTION & SERVICE
Model Question Paper

Time: 3 hrs.

Max. Marks: 75

Part-A

Answer any FIVE questions.

5x5=25

1. Write about waste disposal?
2. What are the different cooking methods? Discuss.
3. What are the factors responsible for losses at the point of receiving food from suppliers?
4. Write brief notes on classification and selection of equipment.
5. List down the delivery methods of food to food service establishment.
6. What are the storage methods that used for different types of food materials?
7. Write about the importance of planning menus.
8. What are different types of cash books?

Part-B

Answer any FIVE questions.

5x10=50

1. a) Discuss the list and importance of appearance in food selection and presentation.
(Or)
b) What are the methods used to improve the nutritive quality of foods in preparation?
2. a) Explain the factors to be considered in designing kitchen institutions.
(Or)
b) Sketch the different types of kitchen layout.
3. a) What are points you remember while receiving food from suppliers?
(Or)
b) What are methods of controlling food costs?
4. a) What are the factors to be considered in selection of kitchen equipment?
(Or)
b) What are the measure to be consider while care and

maintenance of the equipment?

5. a) What are subsidiary books? Explain each one in brief.

(Or)

b) Write the advantages of double entry book keeping.

III year – VI Semester

Paper CN 601 -DIET THERAPY-II

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

- Unit I : Disorders of Metabolism (12credits)
- (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. (10credits)
- (b) Anaemia, PEM
- Unit III : Diet in Cardiovascular diseases. (15credits)
- Coronary heart disease – incidence, pathology and dietary management, prophylactic role of diet.
- Hypertension – Dietary management.
- Unit IV : Diet in renal diseases. (11credits)
- 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: (12credits)
- (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	credits
1. Planning and preparation of diets for diabetics.	2
2. Planning and preparation of diet in obesity.	2
3. Planning and preparation of diet in deficiency disease – Kwashiorkar	1
4. Planning and preparation of diet in Anaemia.	1
5. Planning and preparation of diet in cardiovascular diseases.	2
6. Planning and preparation of diet in hypertension.	1
7. Planning and preparation of diet in renal diseases.	3

References

1. Srilakshmi, B., Dietetics, New Age International (P) Ltd., 2000.
2. Robinson, C.H. and Winley, E.S., Basic Nutrition and Diet Therapy, 5thed, Macmillan Pub, Co., N.Y., 1984.
3. Swaminadhan, M., 1988, Essentials of Food and Nutrition, Volume I and II, TheBangalore Printing and Publishing Co. Ltd., Bangalore.
4. Bamji, Mehtab S, et al., (ed), 2002, Text Book of Human Nutrition, Oxford and IBM Publishing Co., Pvt., Ltd., New Delhi.
5. JgaderVuhatham2001., Foods – Nutrition and Health, Kalyani Publishers, Chennai.
6. Robinson Corinne, M., Marilyn R, Lawler, 1982, Normal and Therapeutic Nutrition, Oxford and IBM Publishing Co. Pvt., Ltd., New Delhi.
7. Guthrie Helen A. and Mary Frances Picciano, 1999, Human Nutrition, WCB Mc. GrawHill, Boston.

III year – VI Semester

Paper CN 601 -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. Give a dietary recommendation for underweight condition.
3. Explain the dietary modifications for treatment of acute nephrosis?
4. Explain type II diabetes and the role of insulin 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?
7. How do you prevent anaemia? Plan a diet.
8. Explain the various tests for diagnosis of diabetes.

Part-B

Answer any FIVE questions.

5x10=50

1. a) Narrate the condition of coronary heart disease and role of the diet in it?

(Or)

b) Define hypertension. Write the causes and diet?

2. a) Describe chronic Glomerulonephritis. What are the dietary restrictions you suggest during this condition?

(Or)

b) What are urinary calculi? Write causes, treatment and dietary management.

3. a) Write about the role and responsibilities of dietician in nutrition care.

(Or)

b) What is diet counselling? Write the various steps involved in diet counselling

4. a) What are the complications of obesity? Plan a diet for an adult obese business man.

(Or)

b) What is PEM? Explain the role of nutrition education in preventing

malnutrition.

5. a) Write about the incidence, symptoms and types of diabetes.

(Or)

b) Write about the dietary treatment, meal management and complications of diabetes.

III year – VI Semester
Paper CN 602 :FOOD SERVICE MANAGEMENT

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

- | | | |
|----------|---|-----------|
| Unit I | : Food Management: Characteristics of food – Food purchasing – Receiving and storage of food. | 10credits |
| Unit II | : Menu planning – Food production – Food Service – Types. | 10credits |
| Unit III | : Sanitation and Hygiene: Personal hygiene – Environment Hygiene and Sanitation. | 10credits |
| Unit IV | : Ventilation lighting, water supply, Food storage, signs of infestation – prevention and control, Preparations: cooking, holding serving, cleaning and dish washing, waste disposal. | 15credits |
| Unit V | : Personnel Management – Development and Policies – In-service training / appraisals. | 12credits |

Practicals

credits

- | | | |
|----|--|---|
| 1. | Visits to food service institution to study layout and food service equipment. | 3 |
| 2. | Planning physical layouts of food service institutions, commercial, non-commercial, school feeding, ICDS etc., | 3 |
| 3. | Visits to dietetic departments in hospitals. | 2 |
| 4. | Visit to Mid day Meal Programmes and observation of food service. | 2 |
| 5. | Visit to fast food centres and canteens. | 2 |

REFERENCES

1. Kawala, K. (1963). Environmental Sanitation in India, Lucknow Publishing House.
2. Van Nostrand, Principles of Food Sanitation – II edition, AVI Book, Reinhold, New York.
3. Avery-A, A Modern Guide to Food Service Equipment, CBI Publishing Inc., 1980.
4. D.M.A. Arulanadam, Dr. K.S. Raman, Financial Accounting, Himalaya Publishing House, 2000.

III year – VI Semester

Paper CN 602 – FOOD SERVICE MANAGEMENT
Model Question Paper

Time: 3 hrs.

Max. Marks: 75

Part-A

Answer any FIVE questions.

5x5=25

1. Explain different cooking methods.
2. What is importance of in-service training and appraisals?
3. Write about waste disposal in food service institutions.
4. What are the methods used to improve the nutritive quality of foods in preparation?
5. List down the delivery methods of food to food service establishment.
6. Why labour policies are important? Explain.
7. Write about dish washing.
8. What are materials used for case of cleaning equipment.

Part-B

Answer any FIVE questions.

5x10=50

1. a) Define menu planning. Explain the importance of food purchase in menu planning?
(Or)
b) Explain the different types of menus.
2. a) Explain about the environmental hygiene in institutional kitchens.
(Or)
b) Explain about the personal hygiene in food preparation.
3. a) Write the significance of water supply in food service institutions.
(Or)
b) What is the storage methods used for different types of food materials?
4. a) Write about different types of food serving methods?
(Or)
b) What are objectives of food service institutions and explain the factors to consider in food service institutions?
5. a) What are the development and policies in case of food service institutions?
(Or)
b) What are the functions of a personnel manager in food service institution?