

SOPHIA COLLEGE (AUTONOMOUS)

Affiliated to University of Mumbai



S.Y.B.A.

Program: B.A.

Course: Applied Component

An introduction to Foods, Nutrition and Dietetics

(Inter-disciplinary subject)

(With effect from the academic year 2019 - 2020)

S.Y.B.A.

Applied Component

To be implemented from the academic year 2019-2020

Semester 3

Course Code	Unit	Topics	Credits	L/week
SBAAPC304	An introduction to foods, nutrition and dietetics I		2.0	4
	I	Food and its relation to health		
	II	Food sources and nutrients		
	III	Food selection and meal planning for healthy persons		
	IV	Nutrition for healthy persons		

Semester 4

Course Code	Unit	Topics	Credits	L/week
SBAAPC404	An introduction to foods, nutrition and dietetics II		2.0	4
	I	Food preservation and packaging		
	II	Food additives and food adulterants		
	III	Therapeutic nutrition and diet planning		
	IV	Diets for some common nutritional problems		

S.Y.B.A. – Applied Component

Interdisciplinary subject

Semester 3

COURSE TITLE: **An Introduction to Foods, Nutrition and Dietetics I**

COURSE CODE: **SBAAPC304**

CREDITS: 2.0

Unit No.	Topic No.	Contents	NOL
I	1.0	Food and its relation to health	15
		The meaning of food, nutrition and nutritional care, nutritional problem existing in the country, over nutrition and under nutrition. Factors affecting nutrition	
II	2.0	Food sources and nutrients	15
		<p>Food as a source of nutrients, nutritional aspects of:</p> <ul style="list-style-type: none"> • Carbohydrates : chemical composition, functions, classification, food sources, digestion, absorption, deficiency and excess, Dietary fibres • Lipids : chemical composition, fatty acids and essential fatty acids, functions, classification, food sources, digestion, absorption, deficiency and excess, Cholesterol • Proteins and amino acids : chemical composition, amino acids and essential amino acids, functions, classification, food sources, digestion, absorption, Quality of proteins, malnutrition • Vitamins : a brief overview of classification, chemistry, functions, sources, deficiency manifestations of the various members , hypervitaminosis with special reference to vitamin A, D , C and B complex • Minerals : a brief overview of classification, functions, sources, deficiency and excess manifestations of the various members with special reference to calcium and iron • Water : distribution in the various tissues, functions, food sources, dehydration and ORT 	

III	3.0	Food selection and meal planning for healthy persons	15
		<ul style="list-style-type: none"> • Recommended Dietary Allowance <ul style="list-style-type: none"> ○ Concept ○ Factors influencing RDA ○ Uses • Basal Metabolic Rate <ul style="list-style-type: none"> ○ Concept ○ Factors influencing BMR • Balanced diet • Meal planning <ul style="list-style-type: none"> ○ various factors affecting meal plans 	
IV	4.0	Nutrition for healthy persons	15
		<ul style="list-style-type: none"> • Infancy and Childhood • Adolescence • Adults • Pregnancy and Lactation • Aging • Industrial and sedentary workers • Athletes 	

Semester 4

COURSE TITLE: An Introduction to Foods, Nutrition and Dietetics II

COURSE CODE: SBAAPC404

CREDITS: 2.0

Unit No.	Topic No.	Contents	NOL
I	1.0	Food preservation and packaging	15
		Food spoilage: Causes and types Food preservation <ul style="list-style-type: none"> • Definition and purpose • Methods of preservation <ul style="list-style-type: none"> ○ Physical methods <ul style="list-style-type: none"> ▪ by use of heat ▪ with radiation ▪ through temperature reduction ▪ dehydration ○ Chemical methods ○ Biological methods Food packaging and (nutritional) labelling <ul style="list-style-type: none"> • Objectives • Materials used – advantages and disadvantages 	
II	2.0	Food additives and food laws	15
		<ul style="list-style-type: none"> • Food additives and their functions. Different types of additives - natural and artificial: <ul style="list-style-type: none"> ○ Sweeteners ○ Colourants ○ Flavorants ○ Fortifiers ○ Antioxidants ○ Preservatives ○ Emulsifiers ○ Stabilizers ○ Sequestrants • Food laws and Food adulteration <ul style="list-style-type: none"> ○ Various food adulterants and their methods of detection 	

III	3.0	Therapeutic nutrition and diet planning	15
		<p>Modification of the basic diet:</p> <ul style="list-style-type: none"> • Soft diet • Semi-fluid diet • Liquid (full fluid diet) <p>Types of diets</p> <ul style="list-style-type: none"> • Bland • Low fibre/high fibre • Low protein/high protein • Low fat/high fat • Low carbohydrate/high carbohydrate • Low sodium diet 	
IV	4.0	Diets for some common nutritional problems	15
		<p>Diets in</p> <ul style="list-style-type: none"> • Fever and infection – typhoid, cholera, tuberculosis • Obesity management • Diarrhoea / Constipation • Liver diseases - Jaundice / Viral hepatitis • Protein calorie malnutrition • Anemia • CVD - Atherosclerosis ,Hypertension • Diabetes mellitus and management • Kidney diseases • Food intolerance and allergy 	

SCHEME OF EXAMINATION

THEORY:				
COURSE CODE	Title of Paper	Internal Assessment Marks	Semester end Examination Marks	Total Marks
SBAAPC304	An Introduction to Foods, Nutrition and Dietetics I	25	75	100
SBAAPC404	An Introduction to Foods, Nutrition and Dietetics II	25	75	100
	TOTAL			200

Scheme of Theory examination at S.Y.B.A. (Sem 3 and Sem 4)

- 1) Each theory paper shall carry 75 marks
- 2) Each theory paper shall be 2 1/2 hours duration
- 3) Each theory paper shall contain 05 questions of 15 marks each as follows:-

Q I: Based on Unit I

Q II: Based on Unit II

Q III: Based on Unit III

Q IV: Based on Unit IV

Q V: Based on Unit I to Unit IV

Semester End Examination 75%

Internal Assessment 25%

1. Internal Assessment:

Sr. No.	Particulars	25 Marks
1	Two class test/ case study / online examination to be conducted in the given semester and best of the two to be considered	20 Marks
2	Attendance	05 Marks

Suggested Reading

1. Davidson, S. *et al.*; Human nutrition and dietetics, Churchill Livingstone Publishers.
2. Joshi, Shubhangini A.; Nutrition and dietetics, Tata Mc Graw and Hill publishers.
3. Srilakshmi, B.; Nutrition Science, New Age International publishers.
4. Gopalan, C. ; Nutritive value of indian foods, National Institute of Nutrition Hyderabad
5. Vimla, V.; Advances in Diet therapy (Practical Manual); New Age International Publishers, 2009
6. Fundamentals of normal nutrition; Connie H. Robinson (1978); Macmillan Publishing Co., New York
7. Patel, K.C. and Prabhu, M.M ; Diet in health and diseases (1988) 2nd Edition Bhalani Medical Book House
8. Swaminathan,M; Principles of nutrition and disease (1966);BAPPCO Publication
9. N. Shakuntala Manay; Foods – facts and principles (1987); Wiley Eastern Ltd.

PRESENTATIONS / ASSIGNMENTS

MEAL PLANNING

Recommended dietary allowances for self and different age groups.

FOOD SOURCES.

Diet planning for different age groups.

