## **HOOGHLY WOMEN'S COLLEGE**

## **DEPARTMENT OF NUTRITIION**

# B.Sc Honours in Nutrition (under CBCS Curriculum of The University of Burdwan)

### PROGRAMME OUTCOME

- **PO-1:** The course is an interdisciplinary programme with knowledge of human anatomy, microbiology, biochemistry and their role in relation to food and health.
- **PO-2:** Students completing the programme of B.SC in Food and Nutrition will have adequate knowledge of Nutrition, Nutrients and the different scientific processes involved in the utilization of various food and nutrient components. The programme provides basic understanding of the correlation between food and health.
- **PO-3:** The programme provides in-depth understanding of the role of food under specific diseased conditions.
- **PO-4:** Students would have had multiple opportunities to learn the skills necessary for applying theoretical knowledge to practical life and enhance their soft skills and employability quotient.

#### PROGRAMME SPECIFIC OUTCOMES

- **PSO-1:** The programme helps to understand the role of nutrition at various stages of life.
- **PSO-2:** The programme helps to understand about nutrition and its implications under different diseased conditions.
- **PSO-3:** The course shows how nutrition is important as an integral part in the development of a community and how nowadays Nutrition and lifestyle changes towards a better future society.
- **PSO-4:** The course helps to understand the microbiology of food and how it affects the storage of food items.
- **PSO-5:** Outcome of the course also includes better understanding of the biotechnological and genetic approach in food industries.

## **COURSE OUTCOMES**

SL NO.	NAME OF THE COURSE	COURSE	COURSE OUTCOMES
1	Nutritional Physiology-I	CC-1	CO-1: Learn the anatomical structures and physiology of different systems of human body CO-2:Gain knowledge on the anatomical structures and functions of various components of the human body system
	Practical		CO-1:Learn the different haematological experiments
2	Nutritional Aspect of Food Items	CC-2	CO-1: Gain knowledge on the relationship of food, nutrition and health CO-2: Understand the basic concepts behind food science and different food processing CO-3: Gain an in-depth understanding on cooking
	Practical		CO-1:Apply scientific knowledge in making food products CO-2: Develop a knowledge by preparing food in one portion size
3	Nutritional Physiology-II	CC-3	CO-1: Learn how the human body maintain the homeostasis CO-2: Understand the anatomical structures and functions of a human body under normal conditions.
	Practical		CO-1: Learn about some specific pathological experiments of human body CO-2: Know the characteristics of different histological slides of human body
4	Physiological aspect of nutrition	CC-04	CO-1: Understand the properties of various micro and macro food components. CO-2: Learn about the basic of nutrition and diet.
	Practical		CO-1: Apply the knowledge of diet planning in community. CO-2: Assess the nutritional status. CO-3: Understand the deficiencies indepth.
5	Nutritional biochemistry	CC-05	CO-1: Learn about the building blocks of

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			food.  CO-2: Understand the metabolism of major food components.  CO-3: Comprehend the Biochemical implications of food components.
	Practical		<ul> <li>CO-1: Utilize the laboratory techniques common to basic and applied food chemistry.</li> <li>CO-2: Analyze the principles behind the analytical technique of food products when presented with a practical problem.</li> <li>CO-3: Evaluate the chemical properties and reactions of various food components.</li> </ul>
6	Nutrition: life cycle approach	CC-06	CO-1: Understand the importance of nutrition in various stages of life. CO-2: Evaluate the nutritional status through the lifecycle. CO-3: Efficiently assess deficiencies.
	Practical		<b>CO-1:</b> Plan a balanced menu throughout the various stages of life. <b>CO-2:</b> Assess the nutritional status.
7	Diet therapy - I	CC-07	CO-1: Understand the implication of diet under diseased conditions. CO-2: Prescribe individualized diets. CO-3: In-depth knowledge on hospital diets. CO-4: understand the correlation between diet and diseases.
	Practical		CO-1: Plan a diet chart under normal conditions. CO-2: Plan a balanced menu for diseased conditions.
8	Nutritional assessment and nutrition programme	CC-08	CO-1: Evaluate the major global issues related to Food and Nutrition board. CO-2: Learn how to educate the community about nutrition and health education. CO-3: Understand different nutrition programme and their implication for the development of the community. CO-4: Generate wellness and healthy lifestyle adoption in community and throughout the country.
	Practical		<b>CO-1:</b> Develop skills to conduct simple nutrition assessments to determine risk

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			for under nutrition and over nutrition.
			CO-2: In depth knowledge about the
			ideal body measurements and
			determination of disease.
9	Community nutrition and epidemiology	CC-09	<b>CO-1:</b> Understand the role of nutrition
	, , , , , , , , , , , , , , , , , , , ,		at community level.
			<b>CO-2:</b> Learn about disease in global scale
			CO-3: Learn about managing waste and
			pollution control.
			CO-4: Evaluation of drinking water.
	Practical		<b>CO-1:</b> Evaluation of microbiology of
			water.
			<b>CO-2:</b> Assessment of disease state of the
			population living in different corner of
			the community.
10	Diet therapy - II	CC-10	CO-1: Understand diet under hospital
			conditions.
			<b>CO-2:</b> Understand the correlation
			between diet and diseases.
	Practical		<b>CO-1:</b> Provide adequate nutrition for
	Tractical		special conditions.
11	Food microbiology and food horns	CC-11	<b>CO-1:</b> Understand the interaction
11	Food microbiology and food borne	CC-11	
ı	disease		between microorganisms and food.
			<b>CO-2:</b> Explain the significance of
			microorganisms in food
			CO-3: Describe the disease
			characteristics of food borne and water
			borne microorganisms.
	Practical		<b>CO-1:</b> Learn basic laboratory process of
			microbiology.
			<b>CO-2:</b> Knowledge about the basic
			reactions of microorganisms.
			<b>CO-3:</b> Differentiate various
			microorganisms.
12	Medical microbiology and pathology	CC-12	<b>CO-1:</b> Learn about pathogenic bacteria
12	Wedical inicrobiology and pathology	CC-12	and viruses and diseases caused by
			·
			them.
			CO-2: Knowledge about natural micro
			flora of human body.
	Practical		<b>CO-1:</b> Assessment of microorganisms in
			spoiled food and water.
			<b>CO-2:</b> Evaluate the antibiotic properties
			of microorganisms.
13	Nutraceutical and functional food	CC-13	CO-1: Understand the role of
			nutraceuticals.
			<b>CO-2:</b> Explain the significance of foods
			to provide immunity in human body.
			to provide infiliality in human body.

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			<b>co-3:</b> Gain in-depth knowledge on the
			relationship between nutrition and food
			biotechnology.
	Practical		<b>CO-1:</b> Gain better understanding and
			Formation of article about the
			significance of foods against different
			disease condition.
14	Food safety and food standard	CC-14	<b>CO-1:</b> Gain in-depth knowledge on various quality control measures of food
			products.
			<b>CO-2:</b> Importance of food specification
			and food label with reference to various
			food additives.
			<b>CO-3:</b> The implications of adulteration of
			food and the toxic effects of
			adulteration.
			CO-4: Gain in-depth knowledge on
			various food laws.
	Practical		<b>CO-1:</b> Assess the adulterants present in
			the food samples.
15	Therapeutic nutrition and critical care	DSE-1	CO-1: Provide adequate nutrition for
	'		special diseased conditions
			<b>CO-2:</b> Understand about critical care for
			patients.
	Practical		<b>CO-1:</b> Understand the working of dietary
			department.
			<b>CO-2:</b> Plan diets and counsel patients
			effectively.
16	Molecular biology	DSE-2	CO-1: Understanding about DNA, RNA
	0,		and nucleic acids.
			CO-2: In depth knowledge about
			formation of these important molecules
			in the body.
	Practical		<b>CO-1:</b> Gain knowledge about the
			different instruments needed in the
			research laboratory.
			<b>CO-2:</b> Basic fundamentals of DNA and
			RNA.
17	Biostatistics and bioinformatics	DSE-3	<b>CO-1:</b> Introduction to bioinformatics and
			statistics in the world of nutrition.
			CO-2: Knowledge about different
			storage data bases of genetic formula.
	Practical		<b>CO-1:</b> Knowledge of data interpretation.
			CO-2: Evaluation of bioinformatics
			approach for structural identification of
			protein and other genetic material.
18	Food spoilage and food preservation	DSE-4	<b>CO-1:</b> Understand the importance of
10	i oou sponage and roou preservation	D3E-4	CO-1. Officerstation the importance of

			food preservation.  CO-2: Educate public on the importance of food preservation.  CO-3: In depth knowledge about food spoilage.
	Practical		CO-1: Knowledge about the food sanitation and hygiene by visiting food industries. CO-2: In depth knowledge about food processing techniques.
19	Environment management and public health	SEC-1	co-1: Gain knowledge about different environmental hazards and their detrimental effect on health co-2: Understand the importance of climate on public health co-3: Gain idea about different types of health hazards
20	Immunology, toxicology and public health	SEC-2	CO-1: Understand the basic of immune system of human body. CO-2: Learn about different toxic agents. CO-3: In depth knowledge about toxic reacts in human body and their control.