

**Shri Rawatpura Sarkar University,  
Raipur**



**Examination Scheme & Syllabus**

**for**

**Bachelor of Science in Nutrition and  
Dietetics**

**Year – III**

(Effective from the session: 2020-21)



**FACULTY OF SCIENCE**  
**Shri Rawatpura Sarkar University, Raipur**

**Bachelor of Science In Nutrition and Dietetics**

**Year –III**

**Examination Scheme**

**(Effective from the session: 2020-21)**

S.N.	Course Code	Th/Pr	Subject	Type of Course	Teaching Hours/Week			TC	Examination Scheme				Total Marks
					L	T	P		Theory		Practical		
									EX	IN	EX	IN	
1	BSCND301	Th	Personnel Management	Core	4	-	-	4	70	30	-	-	100
2	BSCND302	Th	Community Nutrition	Core	4	-	-	4	70	30	-	-	100
3	BSCND303	Th	Advanced Dietetics	Core	4	-	-	4	70	30	-	-	100
4	BSCND304	Th	Dietetics And Counseling	Core	4	-	-	4	70	30	-	-	100
5	BSCND305P	Pr	Lab course V	Core	-	-	4	2	-	-	35	15	50
6	BSCND306P	Pr	Lab Course VI	Core	-	-	4	2	-	-	35	15	50
7	BSCND307P	Pr	Hospital Postings	Core	-	-	8	4	-	-	70	30	100
<b>Total Contact hr per week: 32</b>				<b>Total Credit</b>				<b>24</b>	<b>Total Marks</b>				<b>600</b>



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
**(Effective from the session: 2020-21)**

<b>Course Title</b>	<b>Personnel Management</b>				
<b>Course Code</b>	BSCND301				
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>	
	4	-	-	4	
<b>Prerequisites</b>	Fundamental knowledge of management.				
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>This course aims to help the realization of the organizational goals and the concept of human resource management.</li> </ul>				
<b>Course Contents</b>	<p><b>UNIT I</b></p> <p>Organization and management: a) Definition and types of organization. b) Definition- functions and tools of management. c) Technique of effective management and its application to food preparation and science.</p> <p><b>UNIT II</b></p> <p>Food material management: a) Meaning, definition, and importance. b) Food selection, purchasing, receiving and storeroom management. c) Control in relation to the above operations (material planning, budgeting, material identification, modification and standardization, inventory control, store keeping, definition, objectives, functions, factors underlying successful store-keeping, duties and responsibilities of a storekeeper, purchasing, organization, principle, procedure, systems and quality control).</p> <p><b>UNIT III</b></p> <p>Personnel Management: Recruitment, selection and training of personalities, work standards, productivity, supervision, performance appraisal and motivation incentives for effective performances</p> <p><b>UNIT IV</b></p> <p>Labor policies and legislation: (Personnel policies related to salaries, other emoluments, allowances, leave, uniform and other prize benefit, laws and organization)</p> <p><b>UNIT V</b></p> <p>Laws affecting food service institution to study the following: (hospital, flight kitchen, hotel, restaurant, canteen, Industrial) - a. Organization b. Physical plan and layout. c. Food and silver equipment d. Sanitation and hygiene.</p>				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>Research and support the development and communication of the organization's total compensation plan.</li> </ol>				



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
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	2. Research and analyze information needs and apply current and emerging information technologies to support the human resources function.
<b>Text Books</b>	1. Mohini Sethi & Surjeet Malhan, Catering Management - An Integrated Approach, New Age International Pvt. Ltd. 2. Arun Monappa, Personnel Management, McGraw Hill Education.
<b>Reference Books</b>	1. Fearn, D. Management system for the Hotel Catering & Allied Industries.

<b>Course Title</b>	<b>Community Nutrition</b>				
<b>Course Code</b>	BSCND302				
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>	
	4	-	-	4	
<b>Prerequisites</b>	Fundamental knowledge of basic nutrition and dietetics.				
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>This course will provide an introduction to the practice of public health nutrition, discussion of significant public health nutrition problems today.</li> </ul>				
<b>Course Contents</b>	<p><b>UNIT I</b>            Nutrition and health in National development. Malnutrition- meaning. Factors contributing to malnutrition, over nutrition.</p> <p><b>UNIT II</b>            Nutritional disorders- Epidemiology, clinical features, prevention and dietary treatment for Protein Energy malnutrition, nutritional anaemia &amp; vitamin deficiency disorders. 4. Methods of assessing nutritional status: a) Sampling techniques, Identifications of risk groups, b) Direct assessment - Diet surveys, anthropometric, clinical and biochemical estimation. c) Indirect assessment- Food balance sheet, ecological parameters and vital statistics.</p> <p><b>UNIT III</b>            Improvement of nutrition of a community: a) Modern methods of improvement or nutritional quality of food, food fortification, enrichment and nutrient supplementation. b) Nutrition education themes and messages in nutrition and health, Antenatal and postnatal care</p> <p><b>UNIT IV</b></p>				



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
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	<p>Nutritional and infection relationship : Immunization and its importance, Food borne infection and intoxication diseases, foods involved, methods of prevention, Infestation of food borne diseases , Outbreak, Prevention signs and control of infection. National and International agencies in uplifting the nutritional status -WHO, UNICEF, CARE, ICMR, ICAR, CSIR, CFTRI. Various nutrition related welfare programme,</p> <p><b>UNIT V</b></p> <p>Community nutrition programme planning - Identification of problem, analysis of causes, resources constraints, selection of interventions, setting a strategy, implementations and evaluation of the programme.</p>
<b>Course Outcomes</b>	<ul style="list-style-type: none"> <li>Students will be able to interpret and apply nutrition concepts to evaluate and improve the nutritional health of communities.</li> </ul>
<b>Text Books</b>	<ol style="list-style-type: none"> <li>T. K. Indrani, Manual of Nutrition &amp; Therapeutic Diet.</li> <li>Sehgal and Raghuvanshi, Textbook of Community Nutrition, ICAR.</li> </ol>
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>Suryapata Das, Textbook of Community Nutrition, Academic Publishers.</li> <li>Dr. Prabha Bisht, Community Nutrition in India, Star Publications.</li> </ol>

<b>Course Title</b>	<b>Advanced Dietetics</b>				
<b>Course Code</b>	BSCND303				
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>	
	4	-	-	4	
<b>Prerequisites</b>	Fundamental knowledge of Basic Dietetics				
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>This course aims at enabling the students to reach the advanced level of practicing dietetics.</li> </ul>				
<b>Course Contents</b>	<p><b>UNIT I</b></p> <p>Concept of Diet therapy: growth and source of dietetics, purpose and principles of therapeutic diets, modification of normal diet, classification of therapeutic diets. Role of Dietitian: Definition of nutritional care, interpersonal relationship with patient, planning and implementary dietary care, Team approach to nutritional care. Routine hospital diets: Preoperative and postoperative diets, study and review of hospital diet. Basic concepts and methods of - (a) Oral feeding (b) Tube feeding (c) Parental nutrition (d) Intravenous feeding. Diet in</p>				



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
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	<p>surgical conditions, burns and cancer. Obesity and leanness- causes, complication and health effects, dietary treatment and other recommendation.</p> <p><b>UNIT II</b></p> <p>Diet in fever and infections- Types- metabolism in fever, general dietary consideration diet in influenza, typhoid fever, recurrent malaria and Tuberculosis. Diet in gastritis, peptic ulcer- symptoms, clinical findings, treatment, dietary modification, adequate nutrition, amount of food, and intervals of feeding, Chemically and mechanically irrigating foods, four stage diet (Liquid, soft, convalescent, liberalized diet). Diet in disturbances of small intestine and color. • Diarrhea- (child and adult) - classification, modification of diet, fiber, residue. Fluids &amp; nutritional adequacy. • Constipation- flatulence - dietary considerations. • Ulcerative colitis (adults) - symptoms, dietary treatment. • Spruce, celiac disease- disaccharide intolerance, dietary treatment.</p> <p><b>UNIT III</b></p> <p>Diet in diseases of the liver, gall bladder and pancreas, a) Etiology, symptoms and dietary treatment in - Jaundice, hepatitis, cirrhosis and hepatic coma. b) Role of alcohol in liver diseases. c) Dietary treatment in cholecystitis, cholelithiasis and pancreatitis. Gout- Nature and occurrence of uric acid, causes, symptoms and diet.</p> <p><b>UNIT IV</b></p> <p>Diet in allergy and skin disturbances: Definition, classification, manifestations, common food allergies and test and dietetic treatment. Diet in Diabetes mellitus: a) Incidence and predisposing factors. b) Symptoms-types and tests for detection. c) Metabolism in diabetes d) Dietary treatment &amp; meal management e) Hypoglycemic agent, insulin and its types. f) Complication of diabetes.</p> <p><b>UNIT V</b></p> <p>Diet in Renal diseases: Basic renal function, symptoms and dietary treatment in acute and chronic glomerulonephritis, Nephrosis, renal failure, dialysis. urinary calculi-causes &amp; treatment, acid and alkali producing and neutral foods and dietary treatment. Diet in Cardiovascular diseases: Role of nutrition in cardiac efficiency, incidence of Atherosclerosis, dietary principles, Hyperlipidenmia, Hypertension- causes and dietary treatment, Sodium restricted diet, level of sodium restriction, sources of sodium, danger of severe sodium restriction.</p>
<p><b>Course Outcomes</b></p>	<ul style="list-style-type: none"> <li>• Student will be able to define a dietetic diagnosis and treatment goals in complex patient care by performing the theories of critical reasoning.</li> </ul>
<p><b>Text Books</b></p>	<ol style="list-style-type: none"> <li>1. Y. K. Joshi, Basics of clinical nutrition, Jaypee Brothers Medical Publishers (P) Ltd.</li> <li>2. R. Srilaskshmi, Dietetics, New Age International Publishers.</li> </ol>



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
**(Effective from the session: 2020-21)**

<b>Reference Books</b>	1. Antia & Abraham, Clinical Dietetics and Nutrition, Oxford University Press.
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<b>Course Title</b>	<b>Dietetics And Counseling</b>			
<b>Course Code</b>	BSCND304			
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>
	4	-	-	4
<b>Prerequisites</b>	Fundamental knowledge of nutrition & dietetics.			
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>This course aims at enabling the students to understand the applicatory aspects of a dietitian.</li> </ul>			
<b>Course Contents</b>	<p><b>UNIT I</b>            Practical consideration in giving dietary advice and counseling - a) Factors affecting and individual food choice. b) Communication of dietary advice c) Consideration of behavior modification d) Motivation.</p> <p><b>UNIT II</b>            Counseling and educating patient a) Introduction to nutrition counseling b) Determining the role of nutrition counselor c) Responsibilities of the nutrition counselor d) Practitioner v/s client managed care e) Conceptualizing entrepreneur skills and behavior f) Communication and negotiation skills.</p> <p><b>UNIT III</b>            Teaching aids used by dietitians- charts, leaflets, posters etc., preparation of teaching material for patients suffering from Digestive disorders, Hypertension, Diabetes, Atherosclerosis &amp; Hepatitis and cirrhosis.</p> <p><b>UNIT IV</b>            Computer application a) Use of computers by dietitian b) Dietary computations c) Dietetic management d) Education/ training e) Information storage f) Administrations g) Research</p> <p><b>UNIT V</b>            Computer application a) Execution of software packages b) Straight line, frequency table, bar diagram, pie chart, Preparation of dietary charts for patients c) Statistical computation- mean, median, standard deviation, conclusion and regression test.</p>			



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
**(Effective from the session: 2020-21)**

<b>Course Outcomes</b>	<ul style="list-style-type: none"> <li>• Student will be able to counsel and formulate the nutritional and dietary requirements of the patients/clients.</li> </ul>
<b>Text Books</b>	<ol style="list-style-type: none"> <li>1. T. K. Indrani, Manual of Nutrition &amp; Therapeutic Diet.</li> <li>2. B. K. Mahajan, Methods in Biostatistics, Jaypee Publishers.</li> <li>3. R. Srilaskshmi, Dietetics, New Age International Publishers.</li> </ol>
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>1. Antia &amp; Abraham, Clinical Dietetics and Nutrition, Oxford University Press.</li> <li>2. Dr. Pranab Kumar Banerjee, Introduction to Bio-statistics, S. Chand &amp; Co. Ltd.</li> </ol>

<b>Course Title</b>	<b>Lab Course V</b>				
<b>Course Code</b>	BSCND305P				
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>	
	-	-	2	2	
<b>Prerequisites</b>	Personnel Management and Community Nutrition theory paper				
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• This course aims to help the realization of the organizational goals, the concept of human resource management, the services required and the Units to be taken into consideration within an organization.</li> </ul>				
<b>Course Contents</b>	<ol style="list-style-type: none"> <li>1. Visit and appraisal of any two medical organization.</li> <li>2. Work simplification: food preparation, Calculating work UNIT, time norms etc.</li> <li>3. Costing, accounting, budgeting, purchase.</li> <li>4. Store-keeping: Listing and management of food items in the store.</li> <li>5. Personnel recruitment: Preparations of a project and report making.</li> <li>6. Maintenance of the clothing for persons and staff involved in kitchen area.</li> <li>7. Prepare an inventory for evaluating staffs personal hygiene.</li> </ol>				
<b>Course Outcomes</b>	<ul style="list-style-type: none"> <li>• The students will be able to understand the working ethics as well as the management of an organization.</li> </ul>				





**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
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<b>Text Books</b>	<ol style="list-style-type: none"> <li>1. Mohini Sethi &amp; Surjeet Malhan, Catering Management - An Integrated Approach, New Age International Pvt. Ltd.</li> <li>2. Arun Monappa, Personnel Management, McGraw Hill Education.</li> <li>3. Boella M. J., Personnel management in the hotel &amp; catering industry, 3<sup>rd</sup> edition, Hutchinson, London.</li> </ol>
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>1. Fearn, D. Management system for the Hotel Catering &amp; Allied Industries.</li> </ol>

<b>Course Title</b>	<b>Lab Course VI</b>				
<b>Course Code</b>	<b>BSCND306P</b>				
<b>Course Credits</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>TC</b>	
	-	-	2	2	
<b>Prerequisites</b>	Advance Dietetics and Dietetics & Counselling theory paper.				
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• This course aims at enabling the students to reach the calculative and analytical level of practicing dietetics.</li> </ul>				
<b>Course Contents</b>	<ol style="list-style-type: none"> <li>1. Planning, preparations and calculations of diets with modified- (a) Consistency (b) Fibre and residue (c) Diet for Diarrhoea and constipation (d) Diet for peptic ulcer. (e) Diet for liver disease.</li> <li>2. Planning, preparation and calculation of diets in fever and infections.</li> <li>3. Planning, preparation and calculation of diets for insulin dependent Diabetes mellitus, Planning, snacks. Desserts and beverages for diabetes.</li> <li>4. Planning. Preparation and calculation of diet in cardiovascular diseases.</li> <li>5. Planning, preparations and calculation of diet in Kidney failure, Kidney transplant, renal complication &amp; Kidney stones.</li> <li>6. 2QPlanning, preparations and calculation of diet in Cancer, Trauma (burns) &amp; Surgery.</li> <li>7. Project planning for any one disease.</li> <li>8. Computer application for different diseases.</li> <li>9. Submitting computed data.</li> <li>10. Preparations of teaching aids in the field of nutrition.</li> </ol>				



**FACULTY OF SCIENCE**  
**Bachelor of Science In Nutrition and Dietetics**  
**Year – III**  
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	11. Preparation of case history of a patient and feeding of information in the hard disc.
<b>Course Outcomes</b>	<ul style="list-style-type: none"><li>• Student will be able to formulate the nutritional and dietary requirements of the patients/clients.</li></ul>
<b>Text Books</b>	<ol style="list-style-type: none"><li>1. Y. K. Joshi, Basics of clinical nutrition, Jaypee Brothers Medical Publishers (P) Ltd.</li><li>2. R. Srilaskshmi, Dietetics, New Age International Publishers.</li><li>3. B. K. Mahajan, Methods in Bio-statistics, Jaypee Publishers</li></ol>
<b>Reference Books</b>	<ol style="list-style-type: none"><li>1. Antia &amp; Abraham, Clinical Dietetics and Nutrition, Oxford University Press.</li><li>2. Dr. Pranab Kumar Banerjee, Introduction to Biostatistics, S. Chand &amp; Co. Ltd.</li></ol>