

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE	
Board of Studies in Biochemistry	
UG First Year Programme	
Semester: Second	
Title of Paper	Credits 2/ 4
I) Basics of Food and Nutrition	2
From the Academic Year	2024-2025

Course Name: Basics of Food and Nutrition

Sr. No.	Heading	Particulars
1	Description the course : Including but Not limited to :	This course will enable the student to learn about various food groups, balanced diet, function of various nutrients and their sources. The learner will also be able to provide an understanding of role of therapeutic nutrition for the management of various diseases.
2	Vertical :	Major/Minor/(Open Elective √) /Skill Enhancement / Ability Enhancement/Indian Knowledge System (Choose By √)
3	Type :	Theory
4	Credit:	2 credits / 4 credits (1 credit = 15 Hours for Theory)
5	Hours Allotted :	30 Hours
6	Marks Allotted:	50 Marks
7	Course Objectives: 1. This course will enable the student to learn about various food groups, balanced diet, function of various nutrients and their sources. 2. The learner will also be able to provide an understanding of role of therapeutic nutrition for the management of various diseases.	

8	Course Outcomes: 1. The learner would be able to comprehend the relationship between food and energy and explain the function of proximate principles 2. The learner would be able to apply the knowledge of food in diet planning 3. The learner would be able to assess and explain the different nutritional deficiencies.
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9	Title of OE course: Basics of Food and Nutrition Modules:- 2, Credits: 2
	Module 1: Understanding Food
	Nutritional significance of Carbohydrates, Protein, Lipids, Vitamins, Minerals and Water Definition-Calorie and Joule Food calorimetry-calorific value by Bomb calorimeter, calorific values of proximate principles, concept of BMI, BV and PER. BMR- definition, factors affecting BMR, significance of BMR in clinical diagnosis SDA - General concept and significance Numerical problems based on above concepts
	Module 2: Diet and Nutraceuticals
10	Text Books: 1. SrilakshmiB. (2018). Nutrition Science, 6 th ed. New Delhi: New Age International Publishers 2. Subalakshmi, G and Udipi, S.A.(2021),“Food processing and preservation”, 2 nd Edition,New Age International Publishers, New Delhi. 3. Principles of Biochemistry by Lehninger, Albert L., Nelson David and Cox, Michael M.; CBS publishers.

11	Reference Books: 1. Harpers illustrated biochemistry by Murray, Robert K. <i>etal.</i>; Mc Graw Hill. 2. Shubhangini Joshi, Nutrition and Dietetics TataMcgraw Hill Co. Ltd. 5 th Ed. 2021 3. Manay, N.S. Shadaksharaswamy, M. (2004), “Foods- Facts and Principles”, 2 nd Edition, New Age International Publishers, New Delhi
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12	Internal Continuous Assessment: 40%	External, Semester End Examination: 60% Individual Passing in Internal and External Examination																				
13	Continuous Evaluation through: Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)																					
14	Format of Question Paper: for the final examination Evaluation for <u>Open Elective Course</u>: 50 Marks each Course 1 – 50 marks The evaluation of these courses would include continuous evaluation (internal assessment) and Semester end examinations (External assessment). The evaluation pattern would be as follows: Internal assessment of each course: 20 marks. a. Class test 1: 10 marks b. Quizzes, presentation, project, role play, creative writing, assignment etc. 5 marks c. Attendance and active participation in academic and co-curricular activities: 5 marks. External assessment of each course: – 30 Marks. - Duration: 1 Hour per course - Theory question paper pattern: <table><tr><td>Question</td><td>Based on</td><td>Options</td><td>Marks</td></tr><tr><td>Q.1</td><td>Unit I</td><td>Any 5 out of 7 / Any 2 out of 3</td><td>10</td></tr><tr><td>Q.2</td><td>Unit II</td><td>Any 5 out of 7 / Any 2 out of 3</td><td>10</td></tr><tr><td>Q3.</td><td>Unit I and II</td><td>Any 5 out of 7 / Any 2 out of 3</td><td>10</td></tr><tr><td></td><td></td><td>Total</td><td>30</td></tr></table>		Question	Based on	Options	Marks	Q.1	Unit I	Any 5 out of 7 / Any 2 out of 3	10	Q.2	Unit II	Any 5 out of 7 / Any 2 out of 3	10	Q3.	Unit I and II	Any 5 out of 7 / Any 2 out of 3	10			Total	30
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Sign of the
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