

**SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR
UG Department of Biotechnology
Add on Course: Nutritional Biochemistry
Session 2022-23 (Session 1)
Course Coordinator Report**

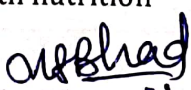
A free Add-On Course for UG students in the Department Biotechnology, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 08th August 2022 to 08th October 2022. The course title was "Nutritional Biochemistry". It is the complete beginner to Expert Course was perfect for anyone who wants to learn Nutritional Biochemistry.

The Nutritional Biochemistry course is designed to explore the biochemical basis of nutrition, focusing on metabolic pathways, nutrient interactions, and their impact on human health. Students will learn about dietary analysis, metabolic disorders, and strategies for nutritional planning.

The course duration was 10 weeks (30 hours). Two theory classes were engaged on Friday & Saturday and one Practical was engaged in every week. The structure of marking system was 50 marks on theory paper and 40 marks on practical examination including 10 marks for internal. The question paper of theory examination was in MCQ type of 25 questions with four multiple choices. Practical examination was also taken on this course for 40 marks. Internal marks assessment was on the basis of regularity, attendance, assignment submission etc. All the 41 students were present in both theory and practical examination. The result was prepared and certificates were also distributed to the students.

Action Taken -Completing a course in Nutritional Biochemistry typically equips a total 83 participants with a deep understanding of the biochemical processes underlying nutrition and metabolism. Students gain insights into how nutrients affect cellular function, metabolic pathways, and overall health. They learn to analyze the biochemical impact of various diets and nutritional interventions, making it possible to develop personalized nutrition plans based on scientific evidence. The course also enhances skills in evaluating and interpreting research related to nutrient metabolism and health outcomes. Ultimately, it prepares individuals to apply biochemical principles to address dietary needs and improve health, whether in clinical settings, research, or public health nutrition




Ms. Mayuri Bhad
Course- Coordinator
Add on Course

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR
UG Department of Biotechnology
Add on Course: Nutritional Biochemistry
Session 2022-23

To,
The Principal
SSES Amt's Science College,
Congress Nagar, Nagpur-12

Subject: Permission to conduct the add on courses in the Microbiology and Biotechnology department during the session 2022-2023

Respected Sir,

This is to request you that, we wish to conduct the add on courses in Microbiology and Biotechnology department these are the certificate courses of thirty hours' time duration.

The details of the courses are submitted here with.

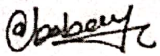
Hence please permit to run the same and oblige me.

Thanking you

2/07/2022



Yours sincerely


HEAD
Department of Microbiology
Science College, Congress Nagar,
NAGPUR.

Permitted
MSHore

SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

UG Department of Biotechnology

NOTICE

Date: 01/08/2022

All the students are informed that U.G. Department of Biotechnology runs Add on Course: Nutritional Biochemistry for the session 2022-23. Interested students of B.Sc. are requested to provide their names to the course Coordinator Ms. Mayuri Bhad on or before 06/08/2022.



Ms. Mayuri Bhad

Ms. Mayuri Bhad
Course- Coordinator
Add on Course



U.G. DEPARTMENT OF BIOTECHNOLOGY, SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

Accredited with CGPA of 3.51 at 'A+' Grade by NAAC, Bangalore
A College with Potential for Excellence
An Institutional Member of APQN
Recognized Center for Higher Learning & Research
A Mentor College under Paramarsh Scheme of UGC, New Delhi
A Mentor College under Paris Sparsh Scheme of Maharashtra State

Add on Course for the Session 2022-23 On Nutritional Biochemistry

Course Introduction

This course explores the biochemical basis of nutrition, focusing on metabolic pathways, nutrient interactions, and their impact on human health. Students will learn about dietary analysis, metabolic disorders, and strategies for nutritional planning.

Course Objectives

- Develop and Understand the nutritional plans
- To study the effects on metabolic processes
- Learn the nutrition and its impact on human health

Registration Date: 06/08/2022

Prof. Atul Bobdey
Coordinator
Dept. of Biotechnology

Prof. Mahendra Dhore
Principal
Science College, Nagpur

Ms. Mayuri Bhad
Course- Coordinator
Add on Course

UG Department of Biotechnology

Course Title: Nutritional Biochemistry (Session 2022-2023)

Course Co-ordinator: Ms. Mayuri Bhad

Course Introduction:

This course explores the biochemical basis of nutrition, focusing on metabolic pathways, nutrient interactions, and their impact on human health. Students will learn about dietary analysis, metabolic disorders, and strategies for nutritional planning.

Course Objectives:

- Develop and Understand the nutritional plans
- To study the effects on metabolic processes
- Learn the nutrition and its impact on human health

Instructional Strategies: Theory class, Practical, Video clips, Models etc.

Evaluation Strategies: Oral discussions and Final MCQ examination

Course Outcomes:

1. Understand the role of biochemistry in nutrition and its impact on human health.
2. Analyze dietary patterns and their effects on metabolic processes.
3. Identify metabolic disorders and their biochemical basis.
4. Develop nutritional plans based on biochemical principles.

Duration of course: Ten weeks (30 Hours)



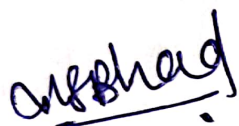
MSBhad
Ms. Mayuri Bhad
Course- Coordinator
Add on Course

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Module: The Structure of Syllabus and system of evaluation

Course	Theory Papers and Practical	Total Marks		
		Theory	Internal	Practical
Certificate Course in Nutritional Biochemistry	Theory paper- Nutritional Biochemistry * Theory examination will be of MCQ pattern having 25 questions each with equal marks.	50	10	40
	* Practical examination will be based on performance evaluation in the laboratory and hands-on-training	100		



Ms. Mayuri Bhad

Add on Course Coordinator



Dr. Amitabh Halder

IQAC Coordinator

Internal Quality Assurance Cell
(IQAC)

S. S. E. S. A. Science College
Congress Nagar, Nagpur.



Prof. Mahendra Dhore

Principal

Principal

S. S. E. S. Amravati's
Science College, Nagpur.



UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Syllabus of Add on Course: Nutritional Biochemistry

Course Units

Unit 1: Introduction to Nutritional Biochemistry

- Understand the basic concepts of nutritional biochemistry.
- Explore the role of macronutrients and micronutrients in metabolism.
- Discuss the importance of vitamins and minerals in biochemical pathways

Unit 2: Dietary Analysis and Nutritional Assessment

- Learn methods for dietary analysis and nutritional assessment.
- Interpret nutritional data to evaluate dietary patterns.
- Analyze nutrient intake and its implications on health.

Unit 3: Metabolic Disorders and Biochemical Basis

- Identify common metabolic disorders related to nutrition.
- Understand the biochemical mechanisms underlying metabolic disorders.
- Explore therapeutic interventions and nutritional strategies for managing metabolic disorders.

Unit 4: Nutritional Planning and Biochemical Approaches

- Develop nutritional plans based on biochemical principles.
- Apply biochemical knowledge to optimize nutrient intake and absorption.
- Explore the role of nutraceuticals and functional foods in promoting health.

Practical Sessions:

1. Dietary Analysis Lab

- Conduct dietary assessments using software tools.
- Analyze nutrient composition and dietary patterns.
- Interpret results to formulate dietary recommendations.

2. Metabolic Disorders Case Studies

- Analyze case studies of metabolic disorders.
- Identify biochemical abnormalities and nutritional interventions.



- Develop management plans based on biochemical pathways.

3. Nutritional Planning Workshop

- Design personalized nutritional plans based on individual needs.
- Incorporate biochemical insights into meal planning.
- Evaluate the effectiveness of nutritional strategies.

4. Nutraceuticals and Functional Foods Demo

- Explore the role of nutraceuticals in health promotion.
- Demonstrate the biochemical actions of functional foods.
- Discuss their potential impact on metabolic pathways.



Ms. Mayuri Bhad

Ms. Mayuri Bhad
Course- Coordinator
Add on Course

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Week-wise teaching plan:

Week	Hrs.	Syllabus
Week 1	1	Understand the basic concepts of nutritional biochemistry.
	1	Explore the role of macronutrients
	1	micronutrients in metabolism.
Week 2	1	Discuss the importance of vitamins and minerals in biochemical pathways
	1	Learn methods for dietary analysis
	1	nutritional assessment.
Week 3	1	Interpret nutritional data
	1	evaluate dietary patterns
	1	Analyze nutrient intake and its implications on health
Week 4	1	Identify common metabolic disorders related to nutrition.
	1	Understand the biochemical mechanisms underlying metabolic disorders
	1	Explore therapeutic interventions
Week 5	1	nutritional strategies for managing metabolic disorders
	2	Develop nutritional plans based on
Week 6	2	biochemical principles
	1	biochemical knowledge
Week 7	2	optimize nutrient intake and absorption.

	2	Explore the role of nutraceuticals
Week 8	2	functional foods
	2	functional foods in promoting health
Week 9	1	Dietary Analysis Lab
	1	Metabolic Disorders Case Studies
Week 10	1	Nutritional Planning Workshop
	1	Nutraceuticals and Functional Foods Demo



MBhad

Ms. Mayuri Bhad
 Course- Coordinator
 Add on Course

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Add on Course: Nutritional Biochemistry

Time Table

w.e.f. 08/08/2022

Day	Theory
Friday	Ms. Mayuri Bhad (R. No-C6) Theory 4.00 PM - 5.00 PM
Saturday	Ms. Mayuri Bhad (R. no -C6) practical, 4.00 PM - 5.00 PM
	Ms. Mayuri Bhad (R. No- C6) Theory, 4.00 PM - 5.00 PM



Ms. Mayuri Bhad

Ms. Mayuri Bhad
Course- Coordinator
Add on Course

ATTENDANCE SHEET (2022-23)

S.S.E.S.A's Science College, Congress Nagar, Nagpur

Add on Course- Nutritional Biochemistry (Session -1)

Class: Nutritional Biochemistry

Month: Aug + Sep. + Oct.

✓
Theory/ Practical:

Name of Lecturer: Ms. Mayuri Bhad

Sr. No	Name of Student	12/08/22	13/08/22	19/08/22	29/08/22	26/08/22	2/09/22	03/09/22	10/09/22	16/09/22	17/09/22	23/09/22	24/09/22	01/10/22	3/10/22	4/10/22	6/10/22	7/10/22	8/10/22																			
1.	ALDAK NUPUR RAJENDRA	P	P	A	P	P	P	P	P	P	P	P	P	A	P	P	P	A	P																			
2.	AMBOLE TRUPTI DNYANESHWAR	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	A																			
3.	ANASANE VAIDEHI GANESH	P	A	P	P	P	P	A	P	A	P	A	P	P	P	P	P	A	P																			
4.	ATILKAR PRANAY DNANESWHAR	P	A	P	A	P	P	P	A	P	A	P	A	P	P	P	A	P	P																			
5.	BAGDE HRUSHIKESH KIRAN	P	P	P	P	P	A	P	A	P	A	P	A	P	A	P	P	P	P																			
6.	BAGDE YASHIKA PRAMOD	P	P	P	P	P	P	P	P	A	P	A	P	A	P	P	P	P	A																			
7.	BANSOD SAMYAK DNYANESWATR	P	P	P	P	A	P	P	P	P	A	P	P	P	P	P	P	P	P																			
8.	BARASKAR ASHWINI UMESH	P	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P																			
9.	BARDE VISHA PRAKASH	P	P	P	A	P	P	P	P	P	A	P	A	P	P	P	P	P	P																			
10.	BEHATE SAHIL GAJANAN	P		P	A	P	P	P	P	P	A	P	P	A	P	P	P	P	P																			

11.	BHAKNE POONAM NIRANJAN	P	P	P	P	A	P	P	P	P	P	A	P	P	P	A	P	P																			
12.	BHOYAR HEMAD AJAY	P	P	P	A	P	P	A	P	P	P	A	P	A	P	P	P	A	P																		
13.	BHUSHANKAR MRUNALI NARESH	P	A	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P																			
14.	BHUTE JANVI SACHIN	P	P	A	P	P	P	P	P	A	P	A	P	P	A	P	P	P	P																		
15.	BISEN KAJAL DEBLAL	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	P																		
16.	BOLE ACHAL ANOOP	P	A	P	P	P	A	P	P	A	P	A	P	A	P	P	P	P	A																		
17.	BONDE SHRUTI VINOD	P	A	P	P	A	P	A	P	P	P	P	A	P	P	A	P	A	P																		
18.	BONDRE TITHI KUSUMAKAR	P	P	P	A	P	A	P	A	P	A	P	A	P	A	P	P	P	P																		
19.	BORKAR DUSHANT RUSHI	P	P	P	A	P	P	P	P	P	P	A	P	A	P	A	P	P	P																		
20.	BRAHMANKAR SMRUTI SANJAY	P	P	P	A	P	P	P	P	A	P	A	P	P	P	A	P	A	P																		
21.	CHANGOLE ANUSHKA DEVIDAS	P	A	P	A	P	A	P	P	P	A	P	A	P	A	P	A	P	A	P																	
22.	CHAUDHARI BHARVI VIKAS	P	P	P	P	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P																	
23.	CHAVHAN AYUSH DILIP	P	P	P	A	P	P	P	P	A	P	A	P	A	P	P	P	P	A																		
24.	CHIKHALKAR HARSHADA WASUDEV	P	P	P	P	A	P	A	P	P	P	P	A	P	A	P	P	P	P																		
25.	DALAL DHANASHREE VIKAS	P	P		P	P	P	A	P	A	P	P	P	P	P	A	P	P	P																		
26.	DALVI CHETNA KAILAS	P	A	P	P	A	P	A	P	A	P	A	P	P	A	P	P	P																			
27.	DEOTALE SHRUTIKA DILIP	P	P	A	P	P	P	P	P	A	P	A	P	A	P	P	P	P	P																		
28.	DESHMUKH TANVI RAJESH	P	A	P	A	P	P	A	P	A	P	A	P	P	P	P	P	P	P																		

11.	BHAKNE POONAM NIRANJAN	P	P	A	P	P	P	P	A	P												
12.	BHOYAR HEMAD AJAY	P	A	P	P	A	P	A	P	P												
13.	BHUSHANKAR MRUNALI NARESH	P	P	A	P	P	A	P	P	P												
14.	BHUTE JANVI SACHIN	P	A	P	A	P	P	P	A	P												
15.	BISEN KAJAL DEBLAL	P	A	P	P	A	P	P	P	P												
16.	BOLE ACHAL ANOOP	P	A	P	A	P	A	P	P	P												
17.	BONDE SHRUTI VINOD	A	P	A	P	P	P	P	P	P												
18.	BONDRE TITHI KUSUMAKAR	P	P	A	P	P	P	A	P	A												
19.	BORKAR DUSHANT RUSHI	P	A	P	P	A	P	P	P	P												
20.	BRAHMANKAR SMRUTI SANJAY	P	A	P	A	P	P	P	P	P												
21.	CHANGOLE ANUSHKA DEVIDAS	P	A	P	A	P	P	P	P	P												
22.	CHAUDHARI BHARVI VIKAS	P	A	P	A	P	A	P	P	P												
23.	CHAVHAN AYUSH DILIP	P	P	P	P	P	P	P	P	P												
24.	CHIKHALKAR HARSHADA WASUDEV	P	P	P	A	P	P	P	A	P												
25.	DALAL DHANASHREE VIKAS	A	P	P	P	P	P	P	P	P												
26.	DALVI CHETNA KAILAS	P	P	P	P	A	P	P	P	P												
27.	DEOTALE SHRUTIKA DILIP	P	A	P	A	P	P	P	P	P												
28.	DESHMUKH TANVI RAJESH	P	A	A	P	A	P	P	P	P												

**SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR**

UG Department of Biotechnology

EXAMINATION NOTICE

Date: 10/10/2022

All the students enrolled for **Add on Course: Nutritional Biochemistry** for the session 2023-24 are informed that Theory and Practical Exam of the course is scheduled on 14/10/2022. All the appearing students are informed to remain present in Biotechnology Laboratory at 10:30 - 11:30AM AM for Theory Exam and at 12:30PM - 5:30PM for Practical Exam.



Ms. Mayuri Bhad
Ms. Mayuri Bhad
Course- Coordinator
Add on Course

List of the Students: Add on Course- Nutritional Biochemistry

(Session 2022-2023)

Sr. No.	Name of Student	Signature
1)	ALDAK NUPUR RAJENDRA	<u>Nupur</u>
2)	AMBOLE TRUPTI DNYANESHWAR	<u>Trupti</u>
3)	ANASANE VAIDEHI GANESH	<u>Ganesh</u>
4)	ATILKAR PRANAY DNANESWHAR	<u>Pranay</u>
5)	BAGDE HRUSHIKESH KIRAN	<u>Kiran</u>
6)	BAGDE YASHIKA PRAMOD	<u>Bagde</u>
7)	BANSOD SAMYAK DNYANESWATR	<u>Dnyaneshwara</u>
8)	BARASKAR ASHWINI UMESH	<u>Ashwini</u>
9)	BARDE VISHA PRAKASH	<u>Vishade</u>
10)	BEHATE SAHIL GAJANAN	<u>Gajanan</u>
11)	BHAKNE POONAM NIRANJAN	<u>Poonam</u>
12)	BHOYAR HEMAD AJAY	<u>Ajay</u>
13)	BHUSHANKAR MRUNALI NARESH	<u>Mrunali</u>
14)	BHUTE JANVI SACHIN	<u>Sachin</u>
15)	BISEN KAJAL DEBLAL	<u>Deblal</u>
16)	BOLE ACHAL ANOOP	<u>Abole</u>
17)	BONDE SHRUTI VINOD	<u>Shruti</u>
18)	BONDRE TITHI KUSUMAKAR	<u>Tithi</u>
19)	BORKAR DUSHANT RUSHI	<u>Rushi</u>
20)	BRAHMANKAR SMRUTI SANJAY	<u>Smruti</u>
21)	CHANGOLE ANUSHKA DEVIDAS	<u>Achangole</u>
22)	CHAUDHARI BHARVI VIKAS	<u>Bhaidari</u>
23)	CHAVHAN AYUSH DILIP	<u>Ayush</u>
24)	CHIKHALKAR HARSHADA WASUDEV	<u>Harshada</u>

25)	DALAL DHANASHREE VIKAS	<u>Dhanashree</u>
26)	DALVI CHETNA KAILAS	<u>Chetna</u>
27)	DEOTALE SHRUTIKA DILIP	<u>Shrutika</u>
28)	DESHMUKH TANVI RAJESH	<u>Tanvi</u>
29)	DHAKATE KRUTIKA MAHESH	<u>Krutika</u>
30)	DHENGRE PRANJAL NARESH	<u>Pranjali</u>
31)	DHOBE RIYA SATISH	<u>Riya</u>
32)	DHORE PARISA PRAMOD	<u>Parisa</u>
33)	DONGRE MAHAK NEELAM	<u>Mahak</u>
34)	GAJBHIYE ARPITA KISHOR	<u>Arpita</u>
35)	GAJBHIYE VASUDHA VIJAY	<u>Vasudha</u>
36)	GHADGE SIDDHANT RAMUJI	<u>Siddhant</u>
37)	GHUGAL RUSHALI GHANSHYAM	<u>Rushali</u>
38)	GUJWAR KHUSHBU PURANSINGH	<u>Khushi</u>
39)	HAKIM SHAFIN RAFIYODDIN	<u>Shafin</u>
40)	HEDYATULLAH SUHANA	<u>Suhana</u>
41)	HIWARKAR RAUNAK KRISHNA	<u>Raunak</u>

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Theory Exam Multiple-Choice Questions (MCQs) Pattern

1. Which macronutrient is the primary source of energy for the body?
 - A) Carbohydrates
 - B) Proteins
 - C) Fats
 - D) Vitamins
 - **Answer: A) Carbohydrates**
2. What is the recommended daily intake of fiber for adults?
 - A) 5 grams
 - B) 10 grams
 - C) 25 grams
 - D) 50 grams
 - **Answer: C) 25 grams**
3. Which vitamin is essential for collagen synthesis?
 - A) Vitamin A
 - B) Vitamin C
 - C) Vitamin D
 - D) Vitamin K
 - **Answer: B) Vitamin C**
4. What metabolic disorder is characterized by insulin resistance and high blood sugar levels?
 - A) Type 1 Diabetes
 - B) Type 2 Diabetes
 - C) Hypothyroidism
 - D) Hyperthyroidism
 - **Answer: B) Type 2 Diabetes**
5. Which nutrient deficiency can lead to neural tube defects in newborns?
 - A) Folic Acid
 - B) Iron
 - C) Calcium
 - D) Vitamin B12
 - **Answer: A) Folic Acid**
6. Which of the following is a micronutrient?
 - a) Carbohydrate
 - b) Protein
 - c) Vitamin C
 - d) Fat
 - Answer: c) Vitamin C**
7. Glycolysis is the metabolic pathway for the breakdown of which nutrient?
 - a) Proteins
 - b) Fats
 - c) Carbohydrates

d) Minerals

Answer: c) Carbohydrates

8. What is the recommended daily intake of water for an adult?

- a) 1 liter
- b) 2 liters
- c) 3 liters
- d) 4 liters

Answer: b) 2 liters

9. Which nutrient deficiency can lead to anemia?

- a) Vitamin C
- b) Iron
- c) Calcium
- d) Vitamin D

Answer: b) Iron

10. Which metabolic disorder is characterized by high blood sugar levels?

- a) Hypertension
- b) Diabetes mellitus
- c) Hyperthyroidism
- d) Arthritis

Answer: b) Diabetes mellitus

11. What is the role of proteins in the body?

- a) Energy storage
- b) Hormone production
- c) Structural component
- d) Vitamin synthesis

Answer: c) Structural component

12. Which nutrient is essential for bone health?

- a) Vitamin C
- b) Calcium
- c) Vitamin A
- d) Vitamin B12

Answer: b) Calcium

13. What is the function of antioxidants in the body?

- a) Promote inflammation
- b) Neutralize free radicals
- c) Increase oxidative stress
- d) Reduce cell damage

Answer: b) Neutralize free radicals

14. Which metabolic pathway produces ATP aerobically?

- a) Glycolysis
- b) Citric Acid Cycle (TCA cycle)
- c) Electron Transport Chain

d) Anaerobic Respiration

Answer: c) Electron Transport Chain

15. How does fiber benefit digestive health?

a) Increases cholesterol levels

b) Reduces constipation

c) Promotes fat absorption

d) Lowers blood sugar levels

Answer: b) Reduces constipation

16) The energy needed for standing quietly is nearly

a) 25 cal/hr

b) 30 cal/hr

c) 60 cal/hr

d) 75 cal/hr

Answer: B

17) The melting point of the lipids is

a) Lower

b) Higher

c) Normal

d) Room temperature

Answer: B

18) The glycaemic index of the honey is

a) 90-95

b) 80-90

c) 60-70

d) 50-60

Answer: B

19) The recommended dietary allowance of fats is

a) 400 g

b) 70 g

c) 56 g

d) 60 mg

Answer: B

20) The average intake of fibres on daily bases is

a) 20 g fiber

b) 30 g fibers

c) 40 g fibers

d) 50 g fibers

Answer: B

21) Which of the following is not a macronutrient?

a) Proteins

b) Carbohydrates

c) Fats

d) Vitamins

Answer: D

22) Which of the following is a monosaccharide?

- a) Lactose
- b) Glucose
- c) Maltose
- d) Sucrose

Answer:b

23). Which of the following vitamins is fat-soluble?

- a) Vitamin A
- b) Vitamin B6
- c) Vitamin B12
- d) Vitamin C

Answer:A

24)Water soluble vitamins include:

- a) Carotenoids
- b) Ascorbic acid
- c) Vitamin D
- d) More than one of the above
- e) None of the above

Answer:B

25)Energy giving food' is :

- a) Food containing protein
- b) Food containing minerals
- c) Food containing carbohydrates
- d) More than one of the above
- e) None of the above

Answer:C



Ms. Mayuri Bhad

Ms. Mayuri Bhad
Course- Coordinator
Add on Course

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Practical Exam Question Paper:

Subject : Nutritional Biochemistry
Center : S.S.E.S.A's Science College, Nagpur
Time : 5hrs per day
Dates : 14/10/2022

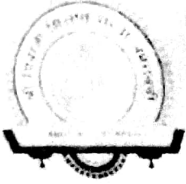
Max. Marks: 40

Q.1. Metabolic Disorders Case Studies	10
Q.2 Dietary Lab Analysis	10
Q.3. Viva-Voce	10
Q.4. Practical Record	10

Total Marks 40



Ms. Mayuri Bhad
Ms. Mayuri Bhad
Course- Coordinator
Add on Course



Shri Shivaji Education Society, Amravati's

SCIENCE COLLEGE

Congress Nagar, Nagpur-12 (M.S.), India



Accredited with CGPA of 3.51 at 'A+' grade by NAAC, Bangalore
 A "College with Potential for Excellence" identified by UGC New Delhi.
 Institutional Member of APQN
 Recognized Centre for Higher Learning and Research
 Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

U.G. DEPARTMENT OF BIOTECHNOLOGY

Add-on Course

Course Exam Name: Nutritional Biochemistry

Name of Student:

..Aldak... Nupur Rajendra

Roll No.:

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Session: 2022-23

Test Date: 14/10/2022

Max. Marks: 50

S. B. ...
 Invigilator Signature

Obtained Marks:

50

INSTRUCTIONS FOR FILLING THE SHEET

- 1 This sheet should not be folded or crushed
- 2 Use only blue/ black ball point pen to fill the circles
- 3 Use of pencil is strictly prohibited.
- 4 Circles should be darkened completely and properly.
- 5 Cutting and erasing on this sheet is not allowed
- 6 Do not use any stray marks on the sheet
- 7 Do not use marker or white fluid to hide the mark

WRONG METHODS

CORRECT METHOD



	A	B	C	D		A	B	C	D		A	B	C	D		A	B	C	D		A	B	C	D
1	●	○	○	○	11	○	○	●	○	21	○	○	○	●	31	○	○	○	○	41	○	○	○	○
2	○	○	●	○	12	○	●	○	○	22	○	●	○	○	32	○	○	○	○	42	○	○	○	○
3	○	●	○	○	13	○	●	○	○	23	●	○	○	○	33	○	○	○	○	43	○	○	○	○
4	○	●	○	○	14	○	○	●	○	24	○	●	○	○	34	○	○	○	○	44	○	○	○	○
5	●	○	○	○	15	○	●	○	○	25	○	○	●	○	35	○	○	○	○	45	○	○	○	○
6	○	○	●	○	16	○	●	○	○	26	○	○	○	○	36	○	○	○	○	46	○	○	○	○
7	○	○	●	○	17	○	●	○	○	27	○	○	○	○	37	○	○	○	○	47	○	○	○	○
8	○	●	○	○	18	●	○	○	○	28	○	○	○	○	38	○	○	○	○	48	○	○	○	○
9	○	●	○	○	19	○	●	○	○	29	○	○	○	○	39	○	○	○	○	49	○	○	○	○
10	○	●	○	○	20	○	●	○	○	30	○	○	○	○	40	○	○	○	○	50	○	○	○	○



UG Department of Biotechnology
Mark List: Add-on Course- Nutritional Biochemistry
(Session 2022-23)

Sr. No.	Name of Student	Marks obtained out of 50 (Theory)	Marks obtained out of 40 (Practical)	Marks obtained out of 10 (Internal)	Total Marks 100	Grade
1)	ALDAK NUPUR RAJENDRA	50	34	10	94	O
2)	AMBOLE TRUPTI DNYANESHWAR	48	35	10	93	O
3)	ANASANE VAIDEHI GANESH	48	36	10	94	O
4)	ATILKAR PRANAY DNANESWHAR	42	35	10	87	A+
5)	BAGDE HRUSHIKESH KIRAN	50	38	10	98	O
6)	BAGDE YASHIKA PRAMOD	50	34	10	94	O
7)	BANSOD SAMYAK DNYANESWATR	42	35	10	87	A+
8)	BARASKAR ASHWINI UMESH	44	35	10	89	A+
9)	BARDE VISHA PRAKASH	42	34	10	86	A+
10)	BEHATE SAHIL GAJANAN	50	38	10	98	O
11)	BHAKNE POONAM NIRANJAN	42	35	10	87	A+
12)	BHOYAR HEMAD AJAY	48	36	10	94	O
13)	BHUSHANKAR MRUNALI NARESH	44	35	10	89	A+

14)	BHUTE JANVI SACHIN	50	34	10	94	0
15)	BISEN KAJAL DEBLAL	49	34	10	93	0
16)	BOLE ACHAL ANOOP	42	35	10	87	A+
17)	BONDE SHRUTI VINOD	48	36	10	94	0
18)	BONDRE TITHI KUSUMAKAR	44	35	10	89	A+
19)	BORKAR DUSHANT RUSHI	50	34	10	94	0
20)	BRAHMANKAR SMRUTI SANJAY	49	34	10	93	0
21)	CHANGOLE ANUSHKA DEVIDAS	50	35	10	95	0
22)	CHAUDHARI BHARVI VIKAS	50	38	10	98	0
23)	CHAVHAN AYUSH DILIP	49	34	10	93	0
24)	CHIKHALKAR HARSHADA WASUDEV	50	34	10	94	0
25)	DALAL DHANASHREE VIKAS	48	35	10	93	0
26)	DALVI CHETNA KAILAS	48	36	10	94	0
27)	DEOTALE SHRUTIKA DILIP	42	35	10	87	A+
28)	DESHMUKH TANVI RAJESH	50	38	10	98	0
29)	DHAKATE KRUTIKA MAHESH	50	34	10	94	0
30)	DHENGRE PRANJAL NARESH	42	35	10	87	A+
31)	DHOBE RIYA SATISH	44	35	10	89	A+

32)	DHORE PARISA PRAMOD	42	34	10	86	A+
33)	DONGRE MAHAK NEELAM	50	38	10	98	0
34)	GAJBHIYE ARPITA KISHOR	50	35	10	95	0
35)	GAJBHIYE VASUDHA VIJAY	50	38	10	98	0
36)	GHADGE SIDDHANT RAMUJI	49	34	10	93	0
37)	GHUGAL RUSHALI GHANSHYAM	50	34	10	94	0
38)	GUJWAR KHUSHBU PURANSINGH	48	35	10	93	0
39)	HAKIM SHAFIN RAFIYODDIN	48	36	10	94	0
40)	HEDYATULLAH SUHANA	42	35	10	87	A+
41)	HIWARKAR RAUNAK KRISHNA	50	38	10	98	0



Ms. Mayuri Bhad

Ms. Mayuri Bhad
Course- Coordinator
Add on Course



Shri Shivaji Education Society Amravati's
**SCIENCE COLLEGE, CONGRESS NAGAR,
NAGPUR**



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CERTIFICATE

Mr./Ku. **NUPUR R. ALDAK** is awarded with certificate on successful completion of the course entitled, Certificate course in "Nutritional Biochemistry"

Session 2022-23 under Add-on course conducted for 30 hours from 08/08/2022 to 08/10/2022 by Department of Biotechnology, SESA's, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'O' Grade.

Ms. Mayuri Bhad
Coordinator, Department of Biotechnology



Prof. M. P. Dhore
Principal, Science College, Nagpur

UG Department of Biotechnology

Add on Course: Nutritional Biochemistry (Session 2022-23)

Feedback form

Thank you for participating in our Add on course Nutritional Biochemistry. Your feedback is crucial in helping us improve the course and enhance your learning experience. Please take a few moments to complete this feedback form.

Que. 1 How would you rate the overall quality of the Add on Course –Nutritional Biochemistry

- a) Excellent
- b) Good
- c) Average

Que. 2 How well did the Add on Course – Nutritional Biochemistry meet your expectations?

- a) Exceeded expectations
- b) Met expectations
- c) Below expectations

Que. 3 How effective were the course instructors in delivering the Add on Course – Nutritional Biochemistry

- a) Very effective
- b) Effective
- c) Ineffective

Que. 4 How likely are you to recommend the Add on Course – Nutritional Biochemistry to others?

- a) Very Likely
- b) Likely
- c) Unlikely

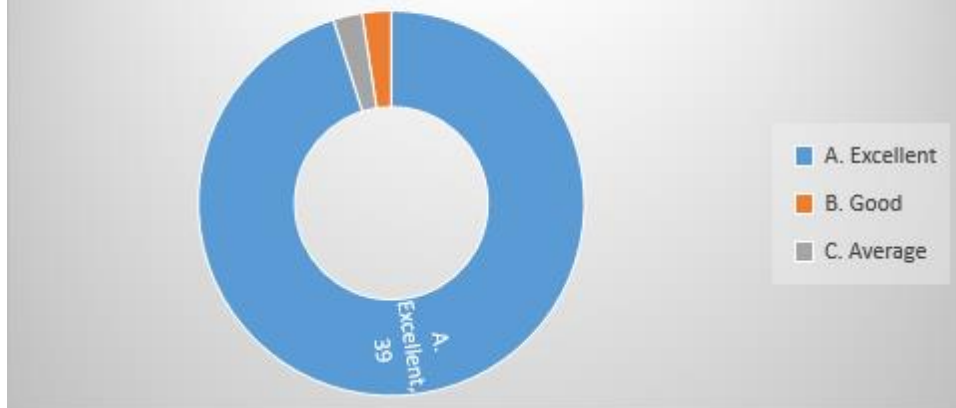
Que. 5 How satisfied are you with the practical sessions of the Add on Course – Nutritional Biochemistry

- a) Very Satisfied
- b) Satisfied
- c) Dissatisfied

UG Department of Biotechnology
Add on Course - Nutritional Biochemistry
(Session 2022-23)
Feedback Response

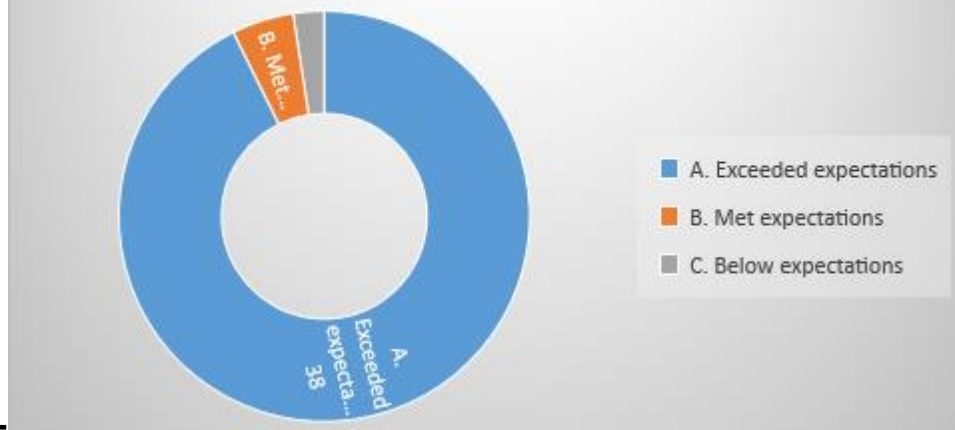
41 responses

Que. 1 How would you rate the overall quality of the Certificate Course - Nutritional Biochemistry

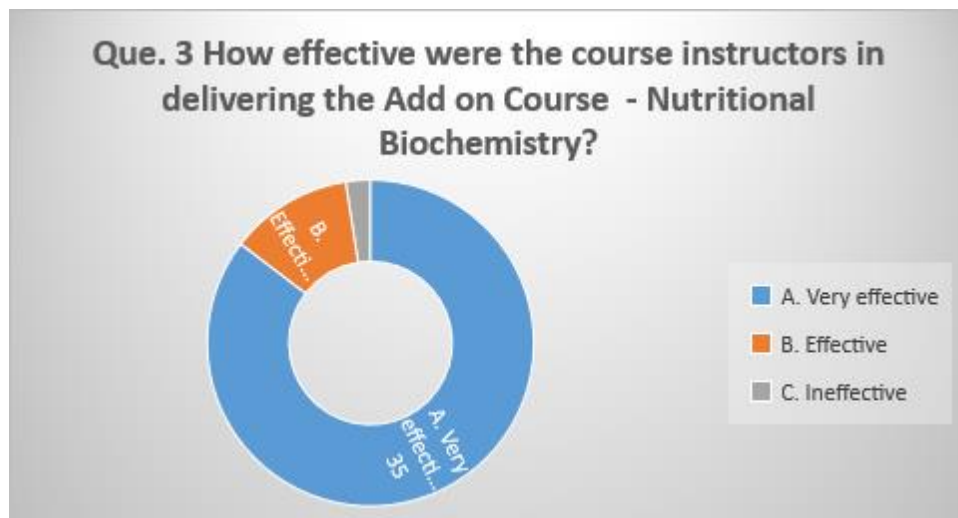


41 responses

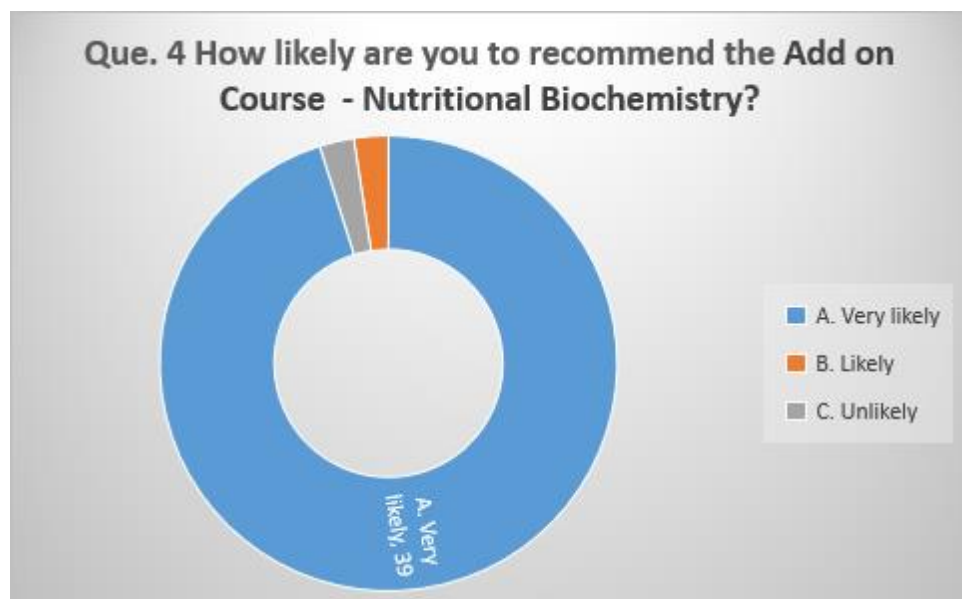
Que. 2 How well did the Add on Course - Nutritional Biochemistry meet your expectation?



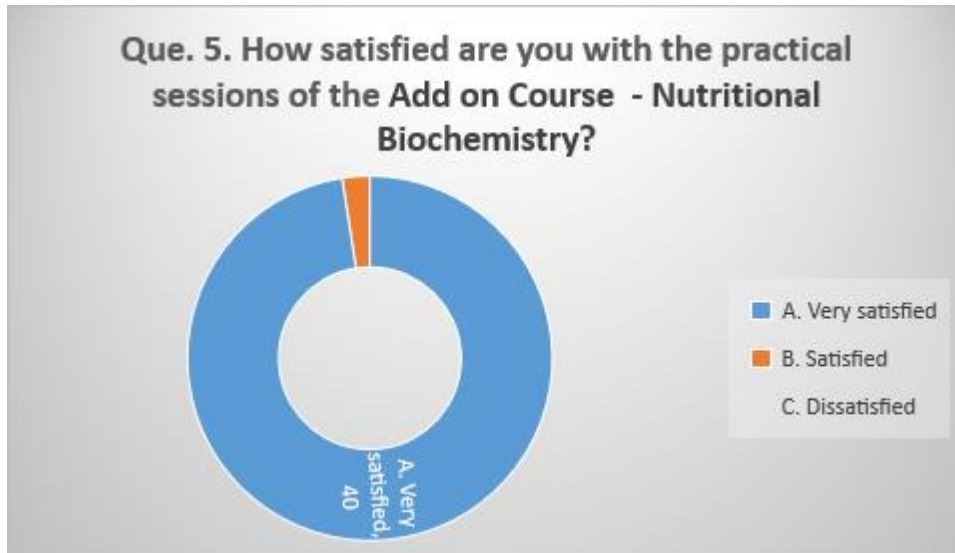
41 responses



41 responses



41 responses



Ms. Mayuri Bhad
Course- Coordinator
Add on Course



Dr. Amitabh Halder
IQAC Coordinator
Internal Quality Assurance Cell
(IQAC)
S. S. E. S. A. Science College
Congress Nagar, Nagpur.

Prof. Mahendra Dhore
Principal
Principal
S. S. E. S. Amravati's
Science College, Nagpur.