

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

**UG Department of Microbiology
Add on Course: Medical Microbiology and Immunology
Session 2023-24
Course Coordinator Report**

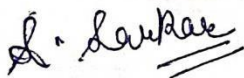
A free Add-On Course for UG students in the Department Microbiology, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 01st August 2023 to 07th October 2023. The course title was "Medical Microbiology and Immunology". It is the complete beginner to Expert Course was perfect for anyone who wants to learn Medical Microbiology and Immunology.

The Medical Microbiology and Immunology course is designed to provide a comprehensive understanding of medical microbiology and immunology. It covers the identification and characterization of pathogens, the interactions between pathogens and hosts, and the mechanisms of the immune response. Emphasis is placed on diagnostic techniques and practical skills essential for disease management and research in clinical settings.

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 83 out of 85 students were present in both theory and practical examination. The result was prepared and certificates were also distributed to the students.

Action Taken: Students gain knowledge about various microbial pathogens, including bacteria, viruses, fungi, and parasites, and their roles in human disease. Students develop practical skills in microbiological and immunological techniques, such as culturing microorganisms, identifying pathogens, and performing immunoassays. The course emphasizes the clinical relevance of microbiology and immunology, preparing students to understand how these principles apply to real-world medical practice, including the development of vaccines, antibiotics, and other therapeutic strategies.




Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

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

UG Department of Microbiology
Add on Course: Medical Microbiology and Immunology
Session 2023-24

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

Subject: For permission to conduct the add on courses in Microbiology and
Biotechnology department during the session 2023-2024

Respected Sir,

This is to request you that, the teachers of Microbiology and Biotechnology
department have prepared the syllabus and modules of the 30 hours certificate
courses for the session 2023-2024.

The details of the course module, syllabus and time table is submitted here
with.

Hence please permit to run the add on courses and oblige me.

Thanking you

Yours sincerely

HEAD
Department of Microbiology
Science College, Congress Nagar,
NAGPUR



Permitted
NDhare

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

UG Department of Microbiology

NOTICE

Date: 17/07/2023

All the students are informed that U.G. Department of Microbiology runs Add on Course: Medical Microbiology and Immunology for the session 2023-24. Interested students of B.Sc. are requested to register their names to the course Coordinator Ms. Sanchari Sarkar on or before 29/07/2023.



S. Sarkar
Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

**U.G. DEPARTMENT OF MICROBIOLOGY,
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR**

Accredited with CGPA of 3.51 at 'A+' Grade by NAAC, Bangalore
A College with Potential for Excellence
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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
Medical Microbiology and Immunology

Course Introduction

This course provides a comprehensive understanding of medical microbiology and immunology. It covers the identification and characterization of pathogens, the interactions between pathogens and hosts, and the mechanisms of the immune response. Emphasis is placed on diagnostic techniques and practical skills essential for disease management and research in clinical settings.

Course Objectives

- **Identify** key pathogens and understand their roles in infectious diseases.
- **Analyze** host-pathogen interactions and their impact on human health.
- **Apply** immunological principles to understand the immune response.
- **Perform** diagnostic techniques for microbial infections and immunological assays.

Registration Date: 29/07/2023

Prof. Atul Bobdey
Coordinator
Dept. of Microbiology

Prof. Mahendra Dhore
Principal
Science College, Nagpur

Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

UG Department of Microbiology

Add-On Certificate Course: Medical Microbiology and Immunology (Session 2023-24)

Course Co-ordinator: Ms. Sanchari Sarkar

Course Description:

Study of pathogens, host-pathogen interactions, and the immune response, including diagnostic techniques.

Skills Gained:

Microbial diagnostics, immunological assays, and disease management

Course Introduction

This course provides a comprehensive understanding of medical microbiology and immunology. It covers the identification and characterization of pathogens, the interactions between pathogens and hosts, and the mechanisms of the immune response. Emphasis is placed on diagnostic techniques and practical skills essential for disease management and research in clinical settings.

Course Outcomes

- **Identify** key pathogens and understand their roles in infectious diseases.
- **Analyze** host-pathogen interactions and their impact on human health.
- **Apply** immunological principles to understand the immune response.
- **Perform** diagnostic techniques for microbial infections and immunological assays.

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

Evaluation Strategies: Oral discussions and Final MCQ examination

Course Objectives

- **Understand** the basic principles of medical microbiology and immunology.
- **Learn** about various pathogens, including bacteria, viruses, fungi, and parasites.
- **Explore** the mechanisms of the immune system and how it combats infections.
- **Gain** hands-on experience in microbial diagnostics and immunological testing.

Duration of course: Ten weeks (30 Hours)



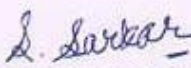
S. Sarkar
Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

UG Department of Microbiology

Add-On Certificate Course: Medical Microbiology and Immunology (Session 2023-24)

Module: The Structure of Syllabus and system of evaluation

Course	Theory Papers and Practical	Total Marks		
		Theory	Internal	Practical
Certificate Course in Medical Microbiology and Immunology	Theory paper- Medical Microbiology and Immunology * 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. Sanchari Sarkar
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 Microbiology

Syllabus of Add-On Certificate Course: Medical Microbiology and Immunology (Session 2023-24)

Course Units

Unit 1: Introduction to Medical Microbiology

- **Topics:**
- Overview of microbiology and its branches.
- Classification of microorganisms.
- Pathogenicity and virulence factors.
- Overview of diagnostic microbiology.
- **Practical 1:**
- Microscopy techniques for identifying microorganisms.

Unit 2: Bacterial Pathogens and Diseases

- **Topics:**
- Major bacterial pathogens and their diseases.
- Mechanisms of bacterial infection and pathogenicity.
- Antibacterial agents and resistance.
- Diagnostic techniques for bacterial infections.
- **Practical 2:**
- Culturing and identifying bacterial pathogens.

Unit 3: Viral, Fungal, and Parasitic Infections

- **Topics:**
- Important viral, fungal, and parasitic pathogens.
- Disease mechanisms and host interactions.
- Antiviral, antifungal, and antiparasitic therapies.
- Diagnostic methods for viral, fungal, and parasitic infections.
- **Practical 3:**
- PCR and serological tests for viral infections.

Unit 4: Immunology and Immune Response

- **Topics:**
- Components and functions of the immune system.
- Innate and adaptive immunity.
- Immunopathology and autoimmune diseases.
- Vaccination and immunotherapy.
- **Practical 4:**
- Immunoassays (ELISA) for detecting antibodies.



S. Sanchari
Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

UG Department of Microbiology
Add-On Certificate Course: Medical Microbiology and
Immunology (Session 2023-24)
Week-wise teaching plan:

Week	Hrs.	Syllabus
Week 1	1	Overview of microbiology and its branches.
	1	Classification of microorganisms.
	1	Pathogenicity and virulence factors
Week 2	1	Overview of diagnostic microbiology
	2	Major bacterial pathogens and their diseases.
Week 3	2	Mechanisms of bacterial infection and pathogenicity.
	1	Antibacterial agents and resistance
Week 4	1	Diagnostic techniques for bacterial infections
	1	Important viral, fungal, and parasitic pathogens.
	1	Disease mechanisms and host interactions.
Week 5	1	Antiviral, antifungal, and antiparasitic therapies.
	2	Diagnostic methods for viral, fungal, and parasitic infections.
Week 6	1	Components and functions of the immune system.
	2	Innate and adaptive immunity.
Week 7	2	Immunopathology
	2	autoimmune diseases
Week 8	2	Vaccination
	2	Immunotherapy
Week 9	1	Microscopy techniques for identifying microorganisms.

	1	Culturing and identifying bacterial pathogens
Week 10	1	PCR and serological tests for viral infections
	1	Immunoassays (ELISA) for detecting antibodies



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UG Department of Microbiology
Add-On Certificate Course: Medical Microbiology and
Immunology (Session 2023-24)

Time Table

w.e.f. 01/08/2023

Day	Theory
Friday	Sanchari Sarkar (R. no C9) Theory 4.00 PM - 5.00 PM
Saturday	Sanchari Sarkar R. no C9) practical, 4.00 PM - 5.00 PM
	Sanchari Sarkar (R. no C9) Theory, 4.00 PM - 5.00 PM



S. Sanchari

Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

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L. Laukar

Ms. Banchari Sarkar

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

UG Department of Microbiology

EXAMINATION NOTICE

Date: 09/10/2023

All the students enrolled for **Add on Course: Medical Microbiology and Immunology** for the session 2023-24 are informed that Theory and Practical Exam of the course is scheduled on 13/10/2023. All the appearing students are informed to remain present in Microbiology Laboratory at 10:30 - 11:30AM AM for Theory Exam and at 12:30PM - 5:30PM for Practical Exam.



S. Sanchari
Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

List of the Students: Add on Course- Medical Microbiology and Immunology
(Session 2023-2024)

Sr. No.	Name of Student	Signature
1)	Ambulkar Isha Pradnyanand	<i>Iambulkar</i>
2)	Anmadwar Khushi Rajendra	<i>Anmadwar</i>
3)	Bahadure Vanshita Dharmapal	<i>Vanshita</i>
4)	Bhagwat Ketki Aviraj	<i>Ketki</i>
5)	Bhalkar Gauri Abhijit	<i>G Bhalkar</i>
6)	Binekar Mansi Sevak	<i>M Binekar</i>
7)	Bisen Riya Deliram	<i>R Bisen</i>
8)	Borkar Mansvi Ravi	<i>M Borkar</i>
9)	Borkar Nandini Ramkrushna	<i>N Borkar</i>
10)	Borkar Shreyasha Dinesh	<i>S Borkar</i>
11)	Buddhalwar Siddhi Vyankatesh	<i>S Buddhalwar</i>
12)	Budhe Vinay Rajendra	<i>V Budhe</i>
13)	Chauhan Shantanusingh Shailendrasingh	<i>S Chauhan</i>
14)	Choudhari Shravani Ramesh	<i>S Choudhari</i>
15)	Dahat Surbhi Yograj	<i>S Dahat</i>
16)	Daheriya Jaysika Ramkishan	<i>J Daheriya</i>
17)	Dahikar Sarwani Atul	<i>S Dahikar</i>
18)	Das Chetana Shaktiprasad	<i>C Das</i>
19)	Datarkar Nayan Prakashrao	<i>N Datarkar</i>
20)	Dhote Shrishti Ravindra	<i>S Dhote</i>
21)	Doye Pranali Shrikrushna	<i>P Doye</i>
22)	Fiske Vedanti Jagdish	<i>V Fiske</i>
23)	Fulzele Tannu Shailesh	<i>T Fulzele</i>
24)	Garode Gargi Shailesh	<i>G Garode</i>
25)	Ghangare Priyanka Liladhar	<i>P Ghangare</i>

26)	Gholse Leena Bhojraj	<u>Gholse</u>
27)	Giri Yash Dilip	<u>Yash</u>
28)	Godse Siddhi Madhav	<u>Godse</u>
29)	Gotmare Parikshit Deepak	<u>Gotmare</u>
30)	Gurnule Madhavi Dhanraj	<u>Madhavi</u>
31)	Gurve Aditi Ramkrushna	<u>Aditi. G</u>
32)	Hadke Tejasvi Nitin	<u>Tejasvi</u>
33)	Jain Shruti Ravikumar	<u>Shruti</u>
34)	Jenekar Shreya Narendra	<u>Shreya</u>
35)	Kadu Kartik Vivek	<u>Kadu</u>
36)	Kale Vaidehi Girish	<u>Kale</u>
37)	Kamane Saurabh Jagdish	<u>Kamane</u>
38)	Kamble Shatakshi Vijay	<u>Shatakshi</u>
39)	Khadse Isha Eshwar	<u>Khadse</u>
40)	Khaparde Sourabhi Rajendra	<u>Khaparde</u>
41)	Khedule Tashu Vipul	<u>Khedule</u>
42)	Khobragade Bhavesh Subhash	<u>Bhavesh</u>
43)	Khorgade Shiwani Vasant	<u>Shiwani</u>
44)	Kohad Purva Sanjay	<u>Purva</u>
45)	Kolhe Yashaswi Pravin	<u>Kolhe</u>
46)	Kudkelwar Janhvi Ravi	<u>Kudkelwar</u>
47)	Lande Sonali Rajendra	<u>Sonali</u>
48)	Lohakare Shravni Kawadu	<u>Lohakare</u>
49)	Madavi Maithili Prabhakar	<u>Maithili</u>
50)	Mahant Abhilasha Chandrashekhar	<u>Mahant</u>
51)	Manwatkar Mahi Pramod	<u>Manwatkar</u>
52)	Masram Prajwal Prakash	<u>Prajwal</u>
53)	Masram Samrudhi Subhash	<u>Masram</u>
54)	Meshram Hemant Vikas	<u>Hemant</u>
55)	Meshram Shrivin Navin	<u>Meshram</u>
56)	Nagbhidkar Astha Sanjay	<u>Astha</u>

57)	Nakhale Mansi Nagesh	MNakhale
58)	Nandanwar Saniya Murlidhar	Nandanwar
59)	Nikose Vaishnavi Vasanta	YNikose
60)	Ninawe Rakhi Sanjay	PNinawe
61)	Nipane Darshika Dindayal	PNipane
62)	Parmar Eshika Raju	Parmar
63)	Pathe Mansi Hanuman	MPathe
64)	Patle Nital Pralhad	NPatle
65)	Patle Vaibhav Sahadeo	VPatle
66)	Patle Vinars Nayaran	VPatle
67)	Pawar Radha Vinod	RPawar
68)	Purkam Sanskruti Kishor	SPurkam
69)	Rahangdale Kajal Tulshidas	RRahangdale
70)	Ramteke Rutuja Shailesh	RRamteke
71)	Rathod Aditi Sanjay	ARathod
72)	Raut Anushka Pramod	ARaut
73)	Raut Khushi Bhalchandra	RRaut
74)	Raut Netra Narendra	NRaut
75)	Saluja Manmeet Kaur Ranjeet Singh	MSaluja
76)	Sepurwar Riya Rajendra	RSepurwar
77)	Singh Riya Virendra Kumar	VSingh
78)	Somkuwar Avantika Ghanshyam	ASomkuwar
79)	Thakre Sakshi Sudhir	SThakre
80)	Tumsare Ankita Suryabhan	Tumsare
81)	Verma Namita Khilawan	Namita
82)	Waghmare Aditya Anand	AWaghmare
83)	Waghmare Samit Kishor	SWaghmare
84)	Wasnik Pradnya Manoj	PWasnik
85)	Yakar Shrushti Rajesh	SYakar



S. Sankar

Ms. Sanchani Sankar

UG Department of Microbiology
Add-On Certificate Course: Medical Microbiology and
Immunology (Session 2023-24)

Theory Exam (M.C.Q. Pattern)

1. Which of the following is a Gram-positive bacterium?
 - A) Escherichia coli
 - B) Staphylococcus aureus
 - C) Salmonella typhi
 - D) Neisseria gonorrhoeae

Answer: B
2. What is the primary function of T-helper cells?
 - A) Produce antibodies
 - B) Phagocytose pathogens
 - C) Activate B cells and macrophages
 - D) Suppress the immune response

Answer: C
3. Which pathogen is known for causing tuberculosis?
 - A) Streptococcus pneumoniae
 - B) Mycobacterium tuberculosis
 - C) Clostridium botulinum
 - D) Bacillus anthracis

Answer: B
4. What is the main function of antibodies?
 - A) Lyse bacterial cells
 - B) Neutralize toxins
 - C) Phagocytose pathogens
 - D) Inhibit viral replication

Answer: B
5. Which of the following is an example of an opportunistic infection?
 - A) HIV
 - B) Influenza
 - C) Candida albicans
 - D) Measles

Answer: C
6. What is the role of macrophages in the immune system?
 - A) Produce antibodies
 - B) Present antigens to T cells
 - C) Produce histamine
 - D) Inhibit viral replication

Answer: B
7. Which viral family does the influenza virus belong to?
 - A) Retroviridae
 - B) Flaviviridae
 - C) Orthomyxoviridae

- D) Coronaviridae

Answer: C

8. Which of the following is a fungal pathogen?

- A) *Escherichia coli*
- B) *Plasmodium falciparum*
- C) *Candida albicans*
- D) *Staphylococcus aureus*

Answer: C

9. Which cell type is primarily responsible for the production of antibodies?

- A) Macrophages
- B) T-helper cells
- C) B cells
- D) Natural killer cells

Answer: C

10. What does ELISA stand for?

- A) Enzyme-Linked Immunosorbent Assay
- B) Enzyme-Linked Inhibitory Assay
- C) Electrophoretic Immunosorbent Assay
- D) Electrophoretic Inhibitory Assay

Answer: A

11. Which of the following is a characteristic of innate immunity?

- A) Memory response
- B) Specificity for particular antigens
- C) Immediate response
- D) Production of antibodies

Answer: C

12. Which bacterium is associated with peptic ulcers?

- A) *Escherichia coli*
- B) *Helicobacter pylori*
- C) *Streptococcus pyogenes*
- D) *Staphylococcus aureus*

Answer: B

13. Which type of immunity involves the activation of B cells?

- A) Cell-mediated immunity
- B) Innate immunity
- C) Humoral immunity
- D) Autoimmunity

Answer: C

14. What is the function of cytokines in the immune response?

- A) Directly kill pathogens
- B) Serve as signaling molecules
- C) Phagocytose pathogens
- D) Produce antibodies

Answer: B

15. Which of the following pathogens causes malaria?

- A) *Plasmodium* spp.
- B) *Trypanosoma* spp.
- C) *Leishmania* spp.

- D) Hepatitis B

Answer: B

24. Which assay is commonly used to measure the concentration of specific antibodies in a sample?

- A) PCR
- B) ELISA
- C) Western blot
- D) Flow cytometry

Answer: B

25. Which type of immunity is provided by vaccination?

- A) Passive immunity
- B) Innate immunity
- C) Active immunity
- D) Natural immunity

Answer: C



S. Sankar

Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

UG Department of Microbiology
Add-On Certificate Course: Medical Microbiology and
Immunology (Session 2023-24)

Practical Exam Question Paper:

Subject : Medical Microbiology and Immunology
Center : S.S.E.S.A's Science College, Nagpur
Time : 5 hrs per day
Dates : 13/10/2023

Max. Marks: 40

Q.1. Culturing and identifying bacterial pathogens	10
Q.2. Immunological assay for detecting antibodies	10
Q.3. Viva-Voce	10
Q.4. Practical Record	10

Total Marks 40



S. Sarkar
Ms. Sanchari Sarkar
Course- Coordinator
Add on Course

UG Department of Microbiology
Add-On Certificate Course: Medical Microbiology and
Immunology (Session 2023-24)
OMR Answer Sheet



Shri Shivaji Education Society, Amravati's
SCIENCE COLLEGE
 Congress Nagar, Nagpur-12 (M.S.), India



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 Mentor College under 'PARAMARSHI Scheme', UGC, New Delhi

U.G. DEPARTMENT OF MICROBIOLOGY

Add-on Course			
Course Exam Name: Medical Microbiology and Immunology			
Name of Student: <u>Tisha Ambulkar</u>			
Roll No.: 	Session: 2023-24		
Test Date: 11/10/2023	Max. Marks: 50		
Invigilator Signature <u>L. Sarkar</u>	Obtained Marks:	50	

INSTRUCTIONS FOR FILLING THE SHEET

1. Fill sheet only, and do not fold or damage
2. Use only blue/black ink for marking
3. Use of pencil, ballpoint pen, etc.
4. OMRs should be delivered complete, and correctly
5. During and after marking, do not use any sharp object
6. Do not use any stray marks on the sheet
7. Do not use marker or white out to correct the mark

WRONG METHODS **CORRECT METHOD**

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10	☐	☐	☐	☐	20	☐	☐	☐	☐	30	☐	☐	☐	☐	40	☐	☐	☐	☐	50	☐	☐	☐	☐

UG Department of Microbiology
Mark List: Add on Course- Medical Microbiology and Immunology
(Session 2023-2024)

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	AmbulkarIshaPradnyanand	50	38	10	98	O
2	AnmadwarKhushiRajendra	48	36	10	94	O
3	BahadureVanshitaDharmapal	50	38	10	98	O
4	Bhagwat KetkiAviraj	48	36	10	94	O
5	BhalkarGauriAbhijit	42	35	10	87	A+
6	Binekar Mansi Sevak	42	34	10	86	A+
7	Bisen Riya Deliram	48	36	10	94	O
8	BorkarMansvi Ravi	42	35	10	87	A+
9	BorkarNandiniRamkrushna	50	38	10	98	O
10	BorkarShreyasha Dinesh	50	34	10	94	O
11	Buddhalwar Siddhi Vyankatesh	48	35	10	93	O
12	Budhe Vinay Rajendra	42	34	10	86	A+
13	Chauhan ShantanusinghShailendrasingh	48	36	10	94	O
14	ChoudhariShravani Ramesh	50	34	10	94	O
15	DahatSurbhiYograj	48	35	10	93	O
16	DaheriyaJaysikaRamkishan	42	34	10	86	A+
17	DahikarSarwaniAtul	48	36	10	94	O
18	Das ChetanaShaktiprasad	42	35	10	87	A+
19	DatarkarNayanPrakashrao	50	38	10	98	O
20	DhoteShrishtiRavindra	50	34	10	94	O
21	DoyePranaliShrikrushna	42	34	10	86	A+
22	Fiske VedantiJagdish	50	38	10	98	O
23	FulzeleTannuShailesh	48	36	10	94	O
24	GarodeGargiShailesh	50	38	10	98	O
25	Ghangare Priyanka Liladhar	48	36	10	94	O
26	GholseLeenaBhojraj	42	35	10	87	A+
27	GiriYashDilip	41	35	10	86	A+
28	Godse Siddhi Madhav	50	38	10	98	O
29	GotmareParikshit Deepak	50	34	10	94	O
30	GurnuleMadhaviDhanraj	42	35	10	87	A+
31	Gurve Aditi Ramkrushna	50	38	10	98	O
32	HadkeTejasvi Nitin	50	34	10	94	O
33	Jain ShrutiRavikumar	42	34	10	86	A+
34	Jenekar Shreya Narendra	50	38	10	98	O
35	KaduKartikVivek	48	36	10	94	O
36	Kale Vaidehi Girish	50	38	10	98	O
37	KamaneSaurabhJagdish	48	36	10	94	O
38	KambleShatakshi Vijay	42	35	10	87	A+
39	KhadseIshaEshwar	50	34	10	94	O
40	KhapardeSourabhiRajendra	48	35	10	93	O
41	KheduleTashuVipul	42	34	10	86	A+
42	KhobragadeBhaveshSubhash	48	36	10	94	O

43	KhorgadeShiwaniVasantrao	42	34	10	86	A+
44	KohadPurva Sanjay	42	35	10	87	A+
45	KolheYashaswiPravin	50	38	10	98	0
46	KudkelwarJanhvi Ravi	50	34	10	94	0
47	LandeSonaliRajendra	50	38	10	98	0
48	LohakareShravniKawadu	48	36	10	94	0
49	Madavi Maithili Prabhakar	50	38	10	98	0
50	MahantAbhilashaChandrashekhar	48	36	10	94	0
51	Manwatkar Mahi Pramod	42	35	10	87	A+
52	MasramPrajwal Prakash	50	34	10	94	0
53	MasramSamrudhiSubhash	48	35	10	93	0
54	Meshram Hemant Vikas	42	34	10	86	A+
55	MeshramShravinNavin	48	36	10	94	0
56	NagbhidkarAstha Sanjay	50	37	10	97	0
57	Nakhale Mansi Nagesh	48	38	10	96	0
58	Nandanwar Saniya Murlidhar	50	38	10	98	0
59	NikoseVaishnaviVasanta	48	36	10	94	0
60	NinaweRakhi Sanjay	50	38	10	98	0
61	NipaneDarshika Dindayal	48	36	10	94	0
62	ParmarEshika Raju	42	35	10	87	A+
63	Pathe Mansi Hanuman	42	35	10	87	A+
64	PatleNitalPralhad	50	38	10	98	0
65	PatleVaibhavSahadeo	50	34	10	94	0
66	PatleVinarsNayaran	42	34	10	86	A+
67	PawarRadha Vinod	49	38	10	97	0
68	PurkamSanskritiKishor	50	35	10	95	0
69	RahangdaleKajalTulshidas	50	38	10	98	0
70	RamtekeRutujaShailesh	48	36	10	94	0
71	Rathod Aditi Sanjay	Ab	Ab	Ab	Ab	Ab
72	RautAnushkaPramod	48	36	10	94	0
73	RautKhushiBhalchandra	42	35	10	87	A+
74	Raut Netra Narendra	50	34	10	94	0
75	SalujaManmeet Kaur Ranjeet Singh	48	35	10	93	0
76	Sepurwar Riya Rajendra	Ab	Ab	Ab	Ab	Ab
77	Singh Riya Virendra Kumar	48	36	10	94	0
78	SomkuwarAvantikaGhanshyam	42	34	10	86	A+
79	ThakreSakshiSudhir	42	34	10	86	A+
80	TumsareAnkitaSuryabhan	47	38	10	95	0
81	VermaNamitaKhilawan	50	38	10	98	0
82	Waghmare Aditya Anand	48	36	10	94	0
83	WaghmareSamitKishor	50	38	10	98	0
84	WasnikPradnya Manoj	48	36	10	94	0
85	YakarShrushti Rajesh	42	35	10	87	A+

A. Sanchari
Ms. Sanchari Sarkar
 Course- Coordinator
 Add on Course





Shri Shivaji Education Society Amravati's
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CERTIFICATE

Mr./Ku. Ambulkar Isha Pradyumanand is awarded with certificate on successful completion of the course entitled, Certificate course in **"Medical Microbiology and Immunology"**

Session 2023-24 under Add-on course conducted for **30 hours** from **01/08/2023** to **07/10/2023** by Department of Microbiology, SSES's, Science College, congress Nagar, Nagpur 440012.

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

S. Sankar

Ms. Sanchari Sarkar

Coordinator, Department of Microbiology



M. P. Dhore

Prof. M. P. Dhore

Principal, Science College, Nagpur

UG Department of Microbiology
Add on Course: Medical Microbiology & Immunology
(Session 2023-24)
Feedback form

Thank you for participating in our Add on course Medical Microbiology & Immunology. 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 – Medical Microbiology & Immunology?

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

Que. 2 How well did the Add on Course – Medical Microbiology & Immunology 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 – Medical Microbiology & Immunology?

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

Que. 4 How likely are you to recommend the Add on Course – Medical Microbiology & Immunology to others?

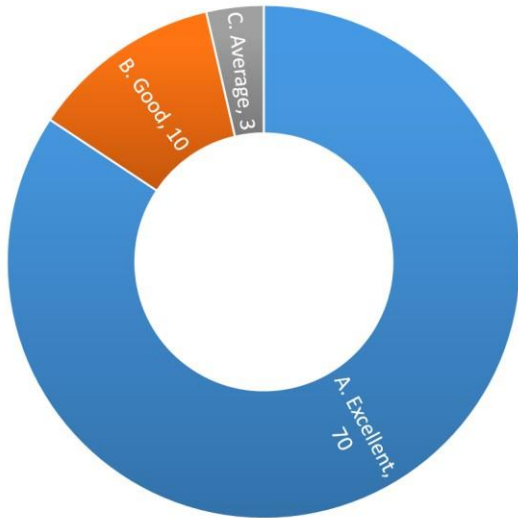
- a) Very Likely
- b) Likely
- c) Unlikely

Que. 5 How satisfied are you with the practical sessions of the Add on Course – Medical Microbiology & Immunology?

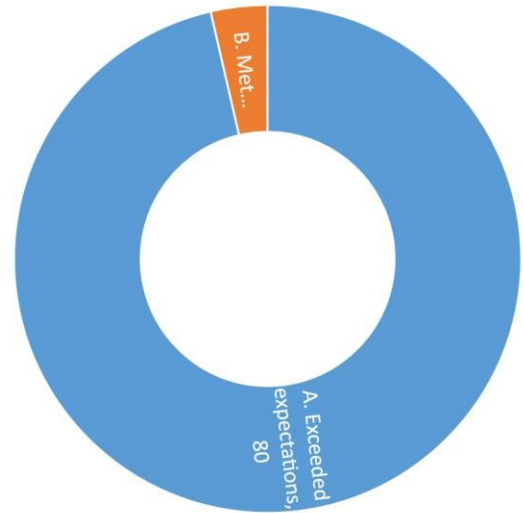
- a) Very Satisfied
- b) Satisfied
- c) Dissatisfied

UG Department of Microbiology
Add on Course: Medical Microbiology & Immunology(Session 2023-24)
Feedback responses

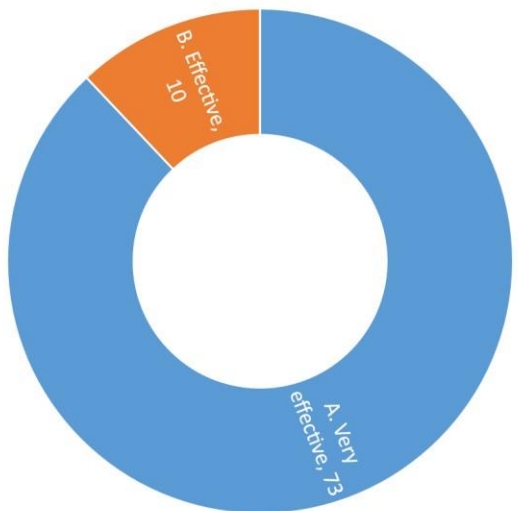
Que. 1 How would you rate the overall quality of the Add on Course – Medical Microbiology & Immunology?



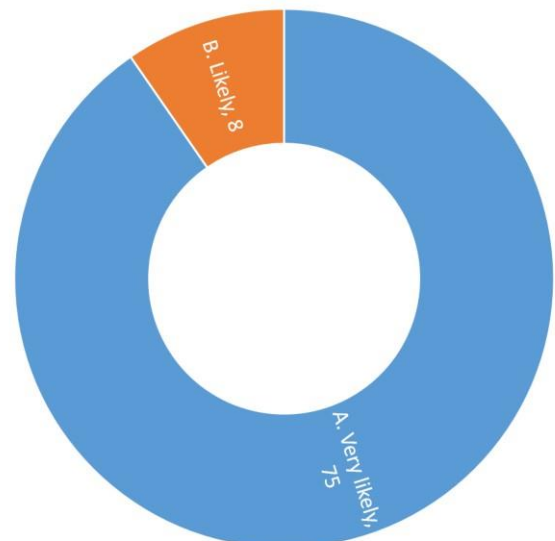
Que. 2 How well did the Add on Course – Medical Microbiology & Immunology meet your expectations?



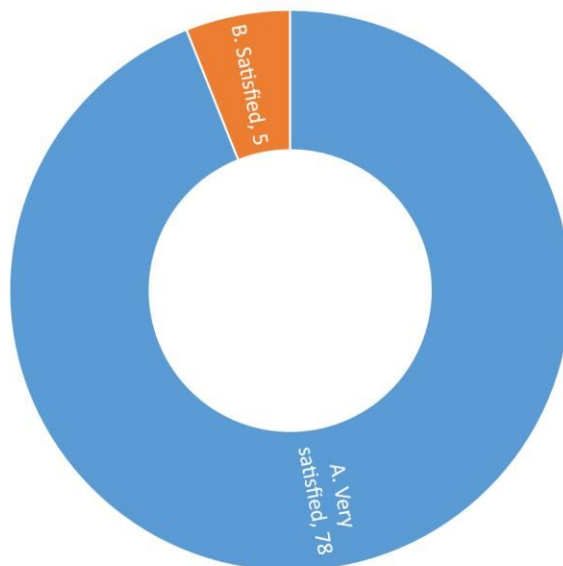
Que. 3 How effective were the course instructors in delivering the Add on Course – Medical Microbiology & Immunology?



Que. 4 How likely are you to recommend the Add on Course – Medical Microbiology & Immunology to others?



Que. 5 How satisfied are you with the practical sessions of the Add on Course – Medical Microbiology & Immunology?



A. Sanchari

Ms. Sanchari Sarkar
Course- Coordinator
Add on Course



Dr. Amitabh Halder

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

Prof. Mahendra Dhole

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