

SHORT TERM COURSE ON  
**BASICS OF  
SPECTROSCOPY**



**4 Weeks**



**Begins June 2020**



**INR 1200**

To,

Date: 10.05.2020

The Dean,

FET, Rama University, Kanpur.

Sub.: Regarding Short Term Course organizing in Department of Applied Sciences and Humanities.

Respected Sir,

We are pleased to inform you that our department is organizing a four week Short Term Course 'Basics of Spectroscopy' from 9 June 2020. A detailed information is attached here with this letter.

You are requested to kindly give approval for the same.

Thanks and Regards



Rati Bajpai

(HoD, Department of Applied Sciences and Humanities)

Approved as per request to  
start the short term course for  
skill enhancement.  
11/05/2020

Date: 28.07.2020

To,  
The Dean,  
Faculty of Engineering and Technology,  
Rama University, Kanpur, U.P.

Subject: Regarding release of incentive grant for short term course

Respected Sir,

This is to inform you that an online short term course on 'Basics of Spectroscopy' was conducted from 9 June 2020 to 9 July 2020 (30 hrs.) by Department of Applied Sciences and Humanities (Faculty of Engineering and Technology, Rama University). The Coordinator of the course was Dr. Deeksha Ranjan (Assistant Professor, Department of Applied Sciences and Humanities). The fees of the course was Rs. 1200/- per student and in total thirteen students got registered for the course. The total collection of the course is Rs. 15,600/-.

You are therefore requested to release the incentive as per the policies of Rama University to the coordinator of the course.

Sincerely yours,

*Rati Bajpai*  
28/7/20

Mrs. Rati Bajpai  
Head of Department  
Department of Applied Sciences and Humanities  
Faculty of Engineering and Technology  
Rama University

Received amount  
of Rs 15600/-  
@ 1200/-  
Deeksha  
3/8/2020

*Dr. Deeksha Ranjan*  
28.7.2020  
(Dr. Deeksha Ranjan)  
(Coordinator)  
(Short term course)

Attachment: The list of registered students along with their transaction ID and date of transfer.

Forwarded to Asst. Director (R4D),  
*[Signature]*  
31/07/2020


Forwarded to Account Section  
for verification.  
*[Signature]*

Total amount 15,600/-  
70% of total amount 7,70,920/-  
*[Signature]*  
11/8/20

Rama University website link

<https://www.ramauniversity.ac.in/news-basics-of-spectroscopy-short-term-course-12-49-767>

(https://api.whatsapp.com/send?phone=916389203444&text=&source=&data=&app\_absent=)

 Admissions 8009007070  
Helpline :

(tel:+918009007070)

[whatsapp.com/send?phone=916389203444&text=&source=&data=&app\\_absent=](https://api.whatsapp.com/send?phone=916389203444&text=&source=&data=&app_absent=)) (University

 (<https://www.facebook.com/RamaUniversityOfficial>)  (<https://twitter.com/RamaUniversity>)

 (<https://www.linkedin.com/school/rama-university>)

 (<https://www.youtube.com/channel/UCCS9vkzOi5IA2krzfCTfeQA>)

 (<https://www.instagram.com/ramauniversitykanpur/>)



(<https://www.ramauniversity.ac.in>)

Home (Default.aspx) > MEDIA (<https://www.ramauniversity.ac.in/MEDIA-12>) > News

## MEDIA

News (<https://www.ramauniversity.ac.in/Media-News-12-49>)

Events (<https://www.ramauniversity.ac.in/Media-Events-12-50>)

Media Coverage (<https://www.ramauniversity.ac.in/Media-MediaCoverage-12-51>)

Gallery (<https://www.ramauniversity.ac.in/Media-Gallery-12-52>)

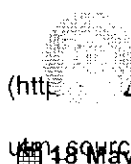
Campus Tour (<https://www.ramauniversity.ac.in/Media-Campus1>)

Downloads (<https://www.ramauniversity.ac.in/Media-Downloads-12-54>)

Video Gallery (<https://www.ramauniversity.ac.in/Media-VideoGallery-12-55>)

Announcements (<https://www.ramauniversity.ac.in/Media-Announcements-12-56>)

## News

	MDS Admissions 2022-23	Admissions 2022-23	Ph.D. Admissions
( <a href="https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23">https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23</a> )	( <a href="https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23">https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23</a> )	( <a href="https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23">https://www.ramauniversity.ac.in/admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23</a> )	( <a href="https://www.ramauniversity.ac.in/phd-admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23">https://www.ramauniversity.ac.in/phd-admission?utm_source=Organic&amp;utm_medium=Website&amp;utm_campaign=Admissions+2022-23</a> )

**APPLY NOW** (<https://forms.gle/kPsddrHaFiGSEg156>)

The Department of Applied Science and Humanities, FET is accepting applications for the Short Term Course on the Basics of Spectroscopy, here are a few details that you must know to understand the relevance and the admission-related details of the course:

### ABOUT THE COURSE

Spectroscopy is the study of the interaction of light (electromagnetic radiation) with the matter. Electromagnetic radiation covers a wide range of frequencies from gamma rays to radio frequencies. Depending on the frequency of radiation interacting with the matter, one can have different forms of spectroscopy.

These spectroscopic techniques allow us to monitor the structural properties of matter. For example, information on bond length, bond strength. Besides providing information on molecular structure, spectroscopic techniques can also be used for quantitative estimation of a substance making spectroscopy an important analytical tool.

Additionally, a spectroscopic transition is characterized by a definite timescale and this can provide information on chemical kinetics.

In this course, the fundamental principles of the different forms of spectroscopy will be elaborated.

The application of these different spectroscopic methods for the elucidation of molecular structure will also be discussed.

The structural and dynamic aspects of spectroscopy are fundamental to physics, chemistry, and biology. Thus, this course will provide a thorough conceptual understanding of these branches of science.

**DURATION:** 4 Weeks

### FEE DETAILS

Registration Fees: INR 200

Course Fees: INR 1000

### Account Details

Account Holder name: **Rama University**

Account Number: **696820110000037**

Account Type: **Current Account**

IFSC Code: **BKID0006968**

Branch Name: **Chaubeypur, Kanpur**

### INSTRUCTOR DETAILS

**Dr. Deeksha Ranjan**

Assistant Professor (Chemistry)

Department of Applied Sciences and Humanities

Faculty of Engineering and Technology

Rama University, Mandhana, Kanpur, U.P.

Send message

### ELIGIBILITY

- The minimum qualification is 10+2 in any field of science.
- Specially targeted for Graduate and Postgraduate students of Biotechnology, Pharma, Medical, biomedical.

**COURSEWARE:** Courseware is provided in print and electronic medium. <https://www.ramauniversity.ac.in/graduate-admissions-2022-23> <https://www.ramauniversity.ac.in/phd-admissions> <https://www.ramauniversity.ac.in/postgraduate-admissions>

**MODE:** Online Lecture and Practice.

**EVALUATION SYSTEM:** A 100 mark paper (50 marks internal and 50 marks external). Score at least 40% to pass.

**BATCHES START:** 9 JUNE 2020

### EMPLOYMENT OPPORTUNITY

- Analytical Chemist
- Research field
- Academic field
- Pharmaceutical labs
- Drug Industries
- Instrumentation lab Instructors
- Environment field

There are various job possibilities in government as well as private job sectors in research as well as an academic field. Industries like the food industry, drug, and pharma industry, textile industry (in cotton impurity and fiber quality), leather industry (identification of leather finishing treatment), pollution measure and control, Agriculture (soil quality analysis, fertilizer analysis) where a person can apply as Research and Development Intern (Biotechnological, Environmental, pharmaceutical, etc), Field Application Scientist, Quality Control, Analytical Scientist, etc.

### TARGET AUDIENCE

- Interested Learners
- Science and Technology Students
- Health care personnel (Medical, Paramedical)
- Personnel of Pharmaceutical
- Agriculture field personnel
- Research personnel
- Lab Instructors

### COURSE CONTENT

- Interaction between Light and Matter
- Different Forms of Spectroscopy
- Vibrational Spectroscopy
- Electronic Spectroscopy
- NMR Spectroscopy
- Rotational Spectroscopy
- Raman Spectroscopy
- Application fields of various spectroscopic techniques

**APPLY NOW** MDS Admissions 2022-23 (https://forms.gle/kPsdDHaFiGSEq156) Admissions 2022-23 (https://www.ramauniversity.ac.in/admissions) Ph.D. Admissions (https://www.ramauniversity.ac.in/phd-admissions) (http://www.ramauniversity.ac.in/mds-admission/?utm\_source=Organic&utm\_medium=Website&utm\_campaign=Admissions+2022+%28MDS%29) (https://www.ramauniversity.ac.in/admissions-2022-23/?utm\_source=Organic&utm\_medium=Website&utm\_campaign=Admissions+2022+%28MDS%29)



## Need Help?

- ▶ Call Us:  
1800 1020 449 (tel:18001020449)
- ▶ General Inquiries:  
[info@ramauniversity.ac.in](mailto:info@ramauniversity.ac.in)  
(mailto:info@ramauniversity.ac.in)
- ▶ Admission Inquiries:  
[admissions@ramauniversity.ac.in](mailto:admissions@ramauniversity.ac.in)  
(mailto:admissions@ramauniversity.ac.in)

## Study

- ▶ Undergraduate (admissions-courses-4-35)
- ▶ Postgraduate (admissions-courses-4-35)
- ▶ Doctoral (admissions-courses-4-35)
- ▶ Diploma (admissions-courses-4-35)

## Popular Courses

- ▶ B. Tech (Rama-Faculty-of-Engineering-and-Technology-3-11-6)
- ▶ MBA (Rama-Faculty-of-Commerce-and-Management-3-11-7)
- ▶ B. Sc. Biotech (Rama-Faculty-of-Engineering-and-Technology-3-11-6)
- ▶ M. Sc. Biotech (Rama-Faculty-of-Engineering-and-Technology-3-11-6)
- ▶ Bachelor of Journalism & MassComm (Rama-Faculty-of-Professional-Studies-3-11-8)
- ▶ Master of Journalism & MassComm (Rama-Faculty-of-Professional-Studies-3-11-8)

## Admissions

- ▶ Admission Process (Admissions-Admissions-Process-4-32)
- ▶ Admission Contacts (Admissions-Admission-Contacts-4-36)
- ▶ Admission Centres (Admissions-Admission-Centres-4-116)
- ▶ RUET (Admissions-RUET-4-118)
- ▶ Scholarships (Admissions-Scholarships-4-37)
- ▶ Education Loan (Admissions-Education-Loan-4-39)
- ▶ Refund Policy (Admissions-Refund-Policy-4-42)
- ▶ FAQs (Admissions-FAQs-4-38)

## Life @ RU

- ▶ Residential Apartment (Campus-Residential-Residential-26-122-50)
- ▶ Safety & Security (Campus-Residential-Safety-26-122-53)
- ▶ Cafeteria (Campus-Residential-Cafeterias-26-122-52)
- ▶ Dining (Campus-Residential-Dining-26-122-51)
- ▶ Medical & Healthcare (Campus-Residential-Medical-26-122-54)
- ▶ Art & Culture (Campus-Art-26-123)
- ▶ Auditorium (Campus-Academic-Facilities-Auditoriums-26-121-44)
- ▶ Shopping (Campus-Residential-Shopping-26-122-57)
- ▶ Sports (Campus-Sports-26-124)
- ▶ Libraries (Campus-Academic-Facilities-Libraries-26-121-45)
- ▶ Labs (Campus-Academic-Facilities-IT-26-121-46)
- ▶ Transportation (Campus-Residential-Transportation-26-122-55)

## Placements

- ▶ Student Development (Placements-Student-Development-11-104)
- ▶ Recruiters (Placements-Recruiters-11-44)
- ▶ Placement Office (Placements-Placement-Office-11-48)

## Quick Links

- ▶ Anti Ragging Help (Quick-Anti-29-141)
- ▶ Grievance Redr
- ▶ Right to Inform
- ▶ Student Login
- ▶ Alumni Association (alumni)
- ▶ Careers (Careers-Submit-Resume-13-61)
- ▶ Research (Research\_Development)
- ▶ Journal (<http://www.ramauniversityjournal.com/>)
- ▶ Blog (blog)

## Press & Media

- ▶ News (Media-News-12-49)
- ▶ Events (Media-Events-12-50)
- ▶ Media Coverage (Media-MediaCoverage-12-51)

## Rama University

NH-91, Rama City, Mandhana,  
Uttar Pradesh - 209202  
1800-1020-449 (tel:18001020449)

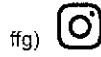
## Follow Rama University

Admissions (https://www.facebook.com/RamaUniversityOfficial)  
2022-23 (https://twitter.com/RamaUniversity)

(http://www.ramauniversity.ac.in/mds- (https://www.ramauniversity.ac.in/mds- (https://www.ramauniversity.ac.in/phd  
Campuses & Maps utm\_source=Organic&utm\_medium=Website&utm\_campaign=Admissions+  
utm\_source=Organic&utm\_medium=Website&utm\_campaign=Admissions+2022-23+Organic&utm\_medium=  
(https://www.linkedin.com/school/rama-university/)  
(https://www.youtube.com/channel/UCvHPC1oGduLpxq2tbtU-



(Contact-Us-20)



(<https://www.instagram.com/ramauniversitykanpur/>)



(About-Government-1-113)

Disclaimer | Terms & Conditions (terms-terms-18-72) | Privacy Policy (terms-privacy-policy-18-73) | © 2022 Rama University

Send message



MDS Admissions

Admissions 2022-23

Ph.D. Admissions

([https://www.ramauniversity.ac.in/mds-admission/?utm\\_source=Organic&utm\\_medium=Website&utm\\_campaign=Admissions+2022+%28MDS%29](https://www.ramauniversity.ac.in/mds-admission/?utm_source=Organic&utm_medium=Website&utm_campaign=Admissions+2022+%28MDS%29)) ([https://www.ramauniversity.ac.in/admission/?utm\\_source=Organic&utm\\_medium=Website&utm\\_campaign=Admissions+2022+%28MDS%29](https://www.ramauniversity.ac.in/admission/?utm_source=Organic&utm_medium=Website&utm_campaign=Admissions+2022+%28MDS%29)) ([https://www.ramauniversity.ac.in/phd-admission/?utm\\_source=Organic&utm\\_medium=Website&utm\\_campaign=Admissions+2022+%28MDS%29](https://www.ramauniversity.ac.in/phd-admission/?utm_source=Organic&utm_medium=Website&utm_campaign=Admissions+2022+%28MDS%29))

Duplicate

Denied

Paid

May Pay-had talk

Not picked called

again

Just

Priyanshi uttam

Priyanka tomar

5/20/2020 10:16:19	Priyanka tomar	Priyankatomar@kit.ac.in	8299807852	Dandura khurd manimau Kannauj	Female	Bank Transfer	21 may 202p
5/20/2020 19:14:21	AJAY KUMAR	ajaykumarstpuuu@gmail.com	9198966498	KASOOLPUR POST OFFICE SAMAISA	Male	Bank Transfer	Receipt no 9ZEF2ZH4 044/UTR AXWB20141 3936793/ DATE OF PAYMENT
5/20/2020 20:02:00	Priyanshi uttam	ac.in	9044457435	Kanpur Nagar	Female	Bank Transfer	
5/21/2020 20:47:15	Alka	1755050011@kit.ac.in	6392804118	139A jagai punwa harjinder nagar kanpur	Female	Bank Transfer	
5/21/2020 16:35:28	Dr. Anand Asthana	anandasthana.maths@gmail.com	9451154153	Lucknow	Male	DD	
5/21/2020 22:03:01	Roshni Butt	com	7974600189	civil line sagar mp	Female		
5/22/2020 17:09:28	Gopal Krishan	gopalmsmeidc@gmail.com	8126719228	DEVELOPMENT CENTRE FOUNDRY NAGAR AGRA 282006	Male	Bank Transfer	P200522170 4451848932 811 (Date:22

Time	Name	Phone	Address	Transfer To	Reference No	Date	Transaction ID
5/22/2020 11:06:40	KOHIL KUMAR						
5/23/2020 11:06:40	MAURVA						
5/23/2020 11:06:40							
5/23/2020 11:06:40							
5/24/2020 12:40:23	Pooja gupta	9016754941	vadod gam, pandesara surat	Bank Transfer		5/27/2020	
5/24/2020 12:53:58	Basharat	9016754941	vadod gam, pandesara surat	Bank Transfer			
5/25/2020 10:11:12	vanshika verma	9682987697	kandhrapur police station azamgarh u.p	DD			
5/25/2020 23:25:37	BARUAH		Chemistry JB College, Jorhal, Assam	Bank Transfer		26-May	
5/26/2020 09:00:00	Unnati Nagariya	9565831478		Bank Transfer			
5/29/2020 7:02:26	Madhu	7355669319	Lowry College, Seventh-day Tiang, Vaivakawn, Aizawl, Mizoram. Pin Code: 9402199997	Bank Transfer	0150065815		
5/29/2020 8:04:06	Unnati Nagariya	9565831478		Bank Transfer	38 (29-may)		
5/30/2020 20:22:43	LALTANPUJA RENTHLEI	9565831478		Bank Transfer	0150073724		
1/6/2020 14:15	Ankit shukla	8299638114	college of pharmacy, kothi, mandhana, Jharkhand	Bank Transfer	96 Date-		
5/6/2020 7:39	Bhupen Kumar Baruah	7002346179	JB College, Jorhal, Assam	UPI			
5/6/2020 11:46	Benjamin Lalbiakmawia	8131824314	I-148 Luikhuantiang, Aizawl	Bank Transfer	0156228299		
6/6/2020 14:17	Komal uttam	8953133201	kanpur	Bank Transfer	0157119248		
6/6/2020 15:56	Sayed Kosar parveen	9669051263	19/1 Haritatak road Begum Baag Colony	DD			
7/6/2020 6:56	Sayed Kosar parveen	9669051263	Begum Baag Colony ujjain	DD			
7/6/2020 11:02	Kaushikram	9894055523	Rajapalayam	DD			

7/6/2020 12:44	R Vaniamalsawmi	raitevan17@gmail.com	Dawrkawm Aizawi, 7895684765 Mizoram	Female	Bank Transfer	IRM3103133 & Transaction Id: 0159201368 40 date of
7/6/2020 21:03	DIVYA THIYAGARAJAN	divya17jd@gmail.com Shilpidevi425@gmail.com	NAGAK, T/248, VALUTHAREDDY, VILLUPURAM, TAMIL NADU 605602 nagar colony	Female	Bank Transfer	
8/6/2020 18:12	Shilpi devi		9454865192 Jakhimpur kheri	Male	Bank Transfer	
8/6/2020 18:16	Shashi Kant	shashibiotech.2014@gmail.com	te h. thathi Distt Doda B. P. O.	Male	Bank Transfer	0160186443 29(IMPS Ref. NO. )
8/6/2020 18:49	Shilpi devi	Shilpidevi425@gmail.com	9622739726 Nodinalla P. nmo. nagar colony	Female	Bank Transfer	1.6019E+10
			9454865192 Jakhimpur kheri	Female	Bank Transfer	

**Participants of online short term course on 'Basics of Spectroscopy' (9 June 2020 to 9 July 2020)**  
**Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Rama University**

S.No.	Timestamp	Name	Email	Mobile	Address	Gender	Mode of Payment	Transaction ID & Date of Payment
1	5/20/2020 20:47	Alka	1755050011@kit.ac.in	6392804118	139A jagai purwa harjinder nagar kanpur	Female	Bank Transfer	Receipt no. 9ZF8F2ZH4044/ UTR: AXMB201413936793/ DATE OF PAYMENT:
2	5/22/2020 17:09	Gopal Krishan	gopalmsmetdc@gmail.com	8126719228	MSME TECHNOLOGY DEVELOPMENT CENTRE FOUNDRY NAGAR AGRA 282006	Male	Bank Transfer	P200522170445184893 2811 (Date:22 May2020)
3	5/29/2020 7:02	Madhu	madhudwivedi332@gmail.com	9565831478	Parasi Dubey Robertsganj sonebhadra	Female	Bank Transfer	015006581538 (29-may)
4	5/29/2020 8:04	Unnati Nagariya	unnatinagariya5@gmail.com	7355669319	POST JAITPUR PURWA JAITPUR DIST MAHOBA UP	Female	Bank Transfer	015007372496 Date-29/05/2020
5	5/30/2020 20:22	LALTANPUJA RENTHLEI	tanarenthlei@gmail.com	9402199997	Staff Quarters, Helen Lowry College, Seventh-day Tiang, Vaivakawn, Aizawl, Mizoram, Pin Code: 796009	Male	Bank Transfer	Txn ID: AXMB201516508786, Date:30/05/2020
6	6/1/2020 14:15	Ankit shukla	Ankit1363@gmail.com	8299638114	Maharana pratap college of pharmacy, kothi, manhdhana, kanpur	Male	Bank Transfer	P200601140627323298 4071 & 1-06-2020
7	6/5/2020 7:39	Bhupen Kumar	bhupen_baruah2009@rediffmail.com	7002346179	JB College, Jorhat, Assam	Male	Bank Transfer	UPI/ 015622829953 & 04/06/2020
8	6/5/2020 11:46	Benjamin Lalbiakmaw	benjaminecotone@gmail.com	8131824311	T-148, Tuikhuatlang, Aizawl	Male	Bank Transfer	015711924852 / 5 June 2020
9	6/7/2020 12:44	R Vanlalmalsa	raltevanlal17@gmail.com	7895684765	B-22/A, Khatla Dawrkawn, Aizawl, Mizoram	Female	Bank Transfer	IRM3103133 & 07/06/2020
10	6/7/2020 21:03	DIVYA THIYAGARA JAN	divya17jd@gmail.com	9626262839	14 and 15, AGRINAGAR, 1/248, VALUTHAREDDY, VILLUPURAM, TAMIL NADU, 605602	Female	Bank Transfer	Transaction Id: 015920136840 date of payment: 07.06.2020
11	6/8/2020 18:16	Shashi Kant	shashibiotech.2014@gmail.com	9622739726	R/O Sharote Teh. Thathri Distt. Doda B. P. O. Nodinalla Pinno. 182203 Jammu and Kashmir	Male	Bank Transfer	016018644329(IMPS Ref. NO. ) Dated 08.06.2020

2)

2)

12	6/8/2020 18:49	Shilpi devi	Shilpidevi425@gmail .com	9454865192	Devkali road subash nagar colony Lakhimpur kheri	Female	Bank Transfer	16018945925
13	6/30/2020 14:11	Poonam Gupta	poonamgupta.2023 @gmail.com	8188802718	193/B Hanumant Vihar, Naubasta, Kanpur Nagar	Female	Bank Transfer	018205238448 & 30/06/2020

**Department of Applied Sciences and Humanities, FET, Rama University**

**Schedule**

**Basics of Spectroscopy (Short Term Course) 09.06.2020 to 09.07.2020**

**Conducted by: Dr. Deeksha Ranjan (Assistant Professor - Chemistry)**

S.NO.	Date/ Time	Time	Topic
1	9/6/2020	10am-11:30 am	Spectroscopy - Introduction, EMR, Properties of waves, Principles, Spectrophotometer
2	10/6/2020	10am-11:30 am	Interaction of EMR with matter, Energy changes in molecules, Adsorption of radiation, Emission of radiation
3	11/6/2020	10am-11:30 am	IR Spectroscopy, Selection Rule, Conditions for the IR absorption, Types of bands
4	12/6/2020	10am-11:30 am	Fundamental bands, Number of fundamental vibrations, Non-fundamental vibrations
5	13/6/2020	10am-11:30 am	Overtone and Combination bands, Fermi Resonance
6	15/6/2020	10am-11:30 am	Coupling, Requirements of coupling, types of molecular vibrations,
7	16/6/2020	10am-11:30 am	Fingerprint region, functional group region
8	17/6/2020	10am-11:30 am	Interpretation of IR spectrum
9	18/6/2020	10am-11:30 am	Factors influencing absorption
10	19/6/2020	10am-11:30 am	Instrumentation, Dispersive IR instrument details, Sampling
11	20/6/2020	10am-11:30 am	FTIR instrumentation details, Examples of IR Spectroscopy
12	22/6/2020	10am-11:30 am	Applications of IR spectroscopy
13	23/6/2020	10am-11:30 am	UV-Vis Spectroscopy - Principle, Electronic excitations, Absorbance of a solution, Beer's Lambert's Law
14	24/6/2020	10am-11:30 am	UV Vis Spectrophotometer, Instrumental Components, Sampling, CCD
15	25/6/2020	10am-11:30 am	Woodward Fieser Rules, Examples
16	26/6/2020	10am-11:30 am	Analysis of UV-Vis Spectra, Applications
17	27/6/2020	10am-11:30 am	NMR Spectroscopy - NMR active nuclei, Principle, Instrumentation detail, sampling
18	29/6/2020	10am-11:30 am	Chemical shift, NMR Spectroscopy Techniques, Applications

19	30/6/2020	10am-11:30 am	Rotational Spectroscopy, Basics, Principle, Example of molecules showing permanent dipole, Rotational Energy of a Diatomic molecule,
20	1/7/2020	10am-11:30 am	General features of rotating system, Moment of Inertia, Classification of Molecular rotors
21	2/7/2020	10am-11:30 am	Rotational Spectra of diatomics (Rigid rotors), Rotational energy levels of a diatomic molecule, Selection rules,
22	3/7/2020	10am-11:30 am	Rotational Spectra of non rigid rotors, Instrumentation in detail, Applications
23	4/7/2020	10am-11:30 am	Raman Spectroscopy, Introduction, Origin of Raman Scattering, Elastic and Inelastic, Rayleigh scattering
24	6/7/2020	10am-11:30 am	Instrumentation
25	7/7/2020	10am-11:30 am	Raman active molecules, Difference between IR and Raman Spectroscopy
26	8/7/2020	10am-11:30 am	Types, Applications
27	9/7/2020	10am-11:30 am	Study of Raman Spectra

HOJ  
 Applied Sci. & Humanities  
 FET, Rama University  
 Kanpur



**Basics of Spectroscopy (Short Term Course) 09.06.2020 to 09.07.2020**

S.NO.	NAME OF STUDENTS	DATE	9/6/2020 10am-11:30 am	10/6/2020 10am-11:30 am	11/6/2020 10am-11:30 am	12/6/2020 10am-11:30 am	13/6/2020 10am-11:30 am	15/6/2020 10am-11:30 am	16/6/2020 10am-11:30 am
		Institute							
1	Pushendra Singh	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
2	Raj Kishor	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
3	Shweta Tiwari	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
4	Ayushi Shukla	MSc(Biotechnology), RU	P	P	P	P	P	P	P
5	Baishali Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P
6	Deeksha Yadav	MSc(Biotechnology), RU	P	P	P	P	P	P	P
7	Rajan Gupta	MSc(Biotechnology), RU	P	P	P	P	P	P	P
8	Raveena Singh	MSc(Biotechnology), RU	P	P	P	P	P	P	P
9	Smriti Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P
10	Tanya Pal	MSc(Biotechnology), RU	P	P	P	P	P	P	P
11	Ms. R. VANLALMALSAWMI	MIZORAM UNIVERSITY	P	P	P	P	P	P	P
12	Mr. BENJAMIN LALBIAKMAWIA	MIZORAM UNIVERSITY	P	P	P	P	P	P	P
13	Dr. BHUPEN KUMAR BARUAH	JB COLLEGE, JORHAT, ASSAM	P	P	P	P	P	P	P
14	Mr. Lalitpauia Renthlei	Department of Environmental Science, Mizoram University	P	P	P	P	P	P	P
15	Mr. Gopal Krishna Sarswat	MSME-TDC (PPDC), Agra	P	P	P	P	P	P	P
16	Ms. Unnati Nagariya	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P
17	Ms. Divya T	Tamil Nadu Agricultural University	P	P	P	P	P	P	P
18	Mr. Shashi Kant	Govt. Higher Secondary School, Kishitwar (J&K)	P	P	P	P	P	P	P
19	Ms. Madhu	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P

*Handwritten signature*

20	Ms. Alka	Kanpur Institute of technology and pharmacy	P	P	P	P	P	P	P	P	P	P
21	Mr. ANKIT SHUKLA	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P	P
22	Ms. Shilpi Devi	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P
23	Ms. Poonam Gupta	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P

*Handwritten signature*

**Basics of Spectroscopy (Short Term Course)**

S.NO.	DATES	NAME OF STUDENTS	Institute	17/6/2020	18/6/2020	19/6/2020	20/6/2020	22/6/2020	23/6/2020	24/6/2020
				10am-11:30 am	10am-11:30 am	10am-11:30 am	10am-11:30 am	10am-11:30 am	10am-11:30 am	10am-11:30 am
1		Pushpendra Singh	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
2		Raj Kishor	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
3		Shweta Tiwari	Mtech(Biotechnology), RU	P	P	P	P	P	P	P
4		Ayushi Shukla	MSc(Biotechnology), RU	P	P	P	P	P	P	P
5		Baishali Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P
6		Deeksha Yadav	MSc(Biotechnology), RU	P	P	P	P	P	P	P
7		Rajan Gupta	MSc(Biotechnology), RU	P	P	P	P	P	P	P
8		Raveena Singh	MSc(Biotechnology), RU	P	P	P	P	P	P	P
9		Smriti Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P
10		Tanya Pal	MSc(Biotechnology), RU	P	P	P	P	P	P	P
11		Ms. R. VANLALMALSAWMI	MIZORAM UNIVERSITY	P	P	P	P	P	P	P
12		Mr. BENJAMIN LALBIAKMAWIA	MIZORAM UNIVERSITY	P	P	P	P	P	P	P
13		DR. BHUPEN KUMAR BARUAH	JB COLLEGE, JORHAT, ASSAM	P	P	P	P	P	P	P
14		Mr. Laitanpuia Renthlei	Department of Environmental Science, Mizoram University	P	P	P	P	P	P	P
15		Mr. Gopal Krishna Sarswat	MSME-TDC (PPDC), Agra	P	P	P	P	P	P	P
16		Ms. Unnati Nagariya	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P

*Handwritten signature*

17	Ms. Divya T	Tamil Nadu Agricultural University	P	P	P	P	P	P	P	P	P	P	P
18	Mr. Shashi Kant	Govt. Higher Secondary School, Kishtwar (J&K)	P	P	P	P	P	P	P	P	P	P	P
19	Ms. Madhu	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P	P	P
20	Ms. Alka	Kanpur Institute of technology and pharmacy	P	P	P	P	P	P	P	P	P	P	P
21	Mr. ANKIT SHUKLA	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P	P	P
22	Ms. Shilpi Devi	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P	P
23	Ms. Poonam Gupta	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P	P

*A. K. Singh*

**Basics of Spectroscopy (Short Term Course)**

S.NO.	DATES	NAME OF STUDENTS	Institute	DATES							2/7/2020
				25/6/2020 10am-11:30 am	26/6/2020 10am-11:30 am	27/6/2020 10am-11:30 am	29/6/2020 10am-11:30 am	30/6/2020 10am-11:30 am	1/7/2020 10am-11:30 am	2/7/2020 10am-11:30 am	
1	Pushpendra Singh	Mtech(Biotechnology), RU	P	P	P	P	P	P	P	P	P
2	Raj Kishor	Mtech(Biotechnology), RU	P	P	P	P	P	P	P	P	P
3	Shweta Tiwari	Mtech(Biotechnology), RU	P	P	P	P	P	P	P	P	P
4	Ayushi Shukla	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
5	Baishali Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
6	Deeksha Yadav	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
7	Rajan Gupta	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
8	Raveenz Singh	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
9	Smriti Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
10	Tanya Pal	MSc(Biotechnology), RU	P	P	P	P	P	P	P	P	P
11	Ms. R. VANLALMALSAWMI	MIZORAM UNIVERSITY	P	P	P	P	P	P	P	P	P
12	Mr. BENJAMIN LALBIAKMAWIA	MIZORAM UNIVERSITY	P	P	P	P	P	P	P	P	P
13	Dr. BHUPEN KUMAR BARUAH	JB COLLEGE, JORHAT, ASSAM	P	P	P	P	P	P	P	P	P
14	Mr. Laitanpuia Renthlei	Department of Environmental Science, Mizoram University	P	P	P	P	P	P	P	P	P
15	Mr. Gopal Krishna Sarswat	MSME-TDC (PPDC), Agra	P	P	P	P	P	P	P	P	P
16	Ms. Unnati Nagariya	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P

17	Ms. Divya T	Tamil Nadu Agricultural University	P	P	P	P	P	P	P	P	P	P
18	Mr. Shashi Kant	Govt. Higher Secondary School, Kishtwar (J&K)	P	P	P	P	P	P	P	P	P	P
19	Ms. Madhu	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P	P
20	Ms. Alka	Kanpur Institute of technology and pharmacy	P	P	P	P	P	P	P	P	P	P
21	Mr. ANKIT SHUKLA	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P	P	P	P
22	Ms. Shiipi Devi	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P
23	Ms. Poonam Gupta	CSJM University, Kanpur	P	P	P	P	P	P	P	P	P	P

*Handwritten signature in blue ink.*

**Basics of Spectroscopy (Short Term Course)**

S.NO.	NAME OF STUDENTS	DATES	3/7/2020 10am-11:30 am	4/7/2020 10am-11:30 am	6/7/2020 10am-11:30 am	7/7/2020 10am-11:30 am	8/7/2020 10am-11:30 am	9/7/2020 10am-11:30 am
		Institute						
1	Pushpendra Singh	Mtech(Biotechnology), RU	P	P	P	P	P	P
2	Raj Kishor	Mtech(Biotechnology), RU	P	P	P	P	P	P
3	Shweta Tiwari	Mtech(Biotechnology), RU	P	P	P	P	P	P
4	Ayushi Shukla	MSc(Biotechnology), RU	P	P	P	P	P	P
5	Baishali Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P
6	Deeksha Yadav	MSc(Biotechnology), RU	P	P	P	P	P	P
7	Rajan Gupta	MSc(Biotechnology), RU	P	P	P	P	P	P
8	Raveena Singh	MSc(Biotechnology), RU	P	P	P	P	P	P
9	Smriti Sharma	MSc(Biotechnology), RU	P	P	P	P	P	P
10	Tanya Pal	MSc(Biotechnology), RU	P	P	P	P	P	P
11	Ms. R. VANLALMALSAWMI	MIZORAM UNIVERSITY	P	P	P	P	P	P
12	Mr. BENJAMIN LALBIAKMAWIA	MIZORAM UNIVERSITY	P	P	P	P	P	P
13	Dr. BHUPEN KUMAR BARUAH	JB COLLEGE, JORHAT, ASSAM	P	P	P	P	P	P
14	Mr. Laltanpuia Renthlei	Department of Environmental Science, Mizoram University	P	P	P	P	P	P
15	Mr. Gopal Krishna Sarswat	MSME-TDC (PPDC), Agra	P	P	P	P	P	P
16	Ms. Unnati Nagariya	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P

17	Ms. Divya T	Tamil Nadu Agricultural University	P	P	P	P	P	P	P
18	Mr. Shashi Kant	Govt. Higher Secondary School, Kishtwar (J&K)	P	P	P	P	P	P	P
19	Ms. Madhu	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P
20	Ms. Alka	Kanpur Institute of technology and pharmacy	P	P	P	P	P	P	P
21	Mr. ANKIT SHUKLA	Maharana Pratap College of Pharmacy, Kanpur	P	P	P	P	P	P	P
22	Ms. Shilpi Devi	CSJM University, Kanpur	P	P	P	P	P	P	P
23	Ms. Poonam Gupta	CSJM University, Kanpur	P	P	P	P	P	P	P

*Handwritten signature*

*Handwritten signature*  
**HOD**  
Applied Sci. & Humanities  
FET, Rama University  
Kanpur



**Details to be filled for e-certificate**

S.No.	Your Name (as required on certificate)	Father's name (as required on certificate)	Institute name (as required on certificate)
1	Ms. R. VANLALMALSAWMI	Mr. R. LALREMRUATA	MIZORAM UNIVERSITY
2	Mr. BENJAMIN LALBIAKMAWIA	Mr. MS DAWNGLIANA	MIZORAM UNIVERSITY
3	Dr. BHUPEN KUMAR BARUAH	Mr. DEBEN CHANDRA BARUAH	JB COLLEGE, JORHAT, ASSAM
4	Mr. Laltanpuia Renthlei	Mr. Biakzidinga Renthlei	Department of Environmental Science, Mizoram University
5	Mr. Gopal Krishna Sarswat	Mr. Satya Murti Sarswat	MSME-TDC (PPDC), Agra
6	Ms. Unnati Nagariya	Mr. Devendra kumar Nagariya	Maharana Pratap College of Pharmacy, Kanpur
7	Ms. Divya T	Mr. Thiyagarajan K	Tamil Nadu Agricultural University
8	Mr. Shashi Kant	Lt. Mr. Kuldeep Singh	Govt. Higher Secondary School, Kishtwar (J&K)
9	Ms. Madhu	Mr. Dharmendra Kumar Dwivedi	Maharana Pratap College of Pharmacy, Kanpur
10	Ms. Alka	Mr. Ram Prakash	Kanpur Institute of Technology and Pharmacy
11	Mr. ANKIT SHUKLA	Mr. RAM SHRAN SHUKLA	Maharana Pratap College of Pharmacy, Kanpur
12	Ms. Shiipi Devi	Lt. Mr. Kamta Prashad	CSJM University, Kanpur
13	Ms. Poonam Gupta	Mr. Rakesh Gupta	Rama University, Kanpur

**Feedback Online Short Term Course Basics of Spectroscopy**

Timestamp	Email Address	Topic relevance	PPT	Subject knowledge and topic	Presentation skill	Was it beneficial?	Any suggestion?	On which topic do you want other course?
7/9/2020 22:55:55		Very good	Very good	Very good	Very good	Yes, very much	No	Any core topic which helps in future
7/9/2020 23:00:34	gopalmsmetdc@gmail.com	Good	Very good	Good	Good	Yes, okay	No	No
7/9/2020 23:00:35	b.k.baruah2000@gmail.com	Excellent	Good	Very good	Very good	Yes, very much	Arrange another online course in future	UV Visible
7/9/2020 23:00:38	divya17jd@gmail.com	Excellent	Good	Very good	Very good	Yes, very much	It would be better if we had some virtual tour on instrumentation parts	Chromatography, Microscopy

3

7/9/2020 23:03:04	shashibiotech.2014@gmail.com	Excellent	Very good	Very good	Very good	Very good	Yes, very much	Provide detailed study material in the form of notes.	Flowcytometry
7/9/2020 23:07:32	shilpidevi425@gmail.com	Excellent	Very good	Good	Good	Good	Yes, very much	Some topics explanation must be in hindi	Food technology
7/10/2020 6:15:45	poonamgupta.2023@gmail.com	Excellent	Very good	Very good	Very good	Very good	Yes, very much	Mam I want your guidance every time with your blessings.	Any of the topics
7/10/2020 10:35:04	madhudwivedi32@gmail.com	Excellent	Very good	Very good	Very good	Very good	Yes, very much	Some Topics should be explained in hindi as well.	Basic concepts of pharmacology

3)

7/10/2020 12:02:26	raltevanlal17@gmail.com	Very good	Good	Good	Good	Yes, okay	virtual working (video) of instruments can be presented for better understanding of the instrument. And also, how the study will be carried out - Chromatography	
7/10/2020 12:03:06	unnatinagariya5@gmail.com	Excellent	Okay	Very good	Very good	Yes, very much	Any other change ment regarding this course. Application of biopharmaceutics and pharmacokinetics.	
7/11/2020 13:11:25	tanarenthlei@gmail.com	Very good	Very good	Good	Good	Yes, very much	No Practical usage of spectrophotometer	
7/13/2020 11:40:12	ankit1363@gmail.com	Excellent	Good	Good	Good	Yes, very much	please arrange more webinar HPLC	

30 30

7/13/2020 13:48:41	benjaminecoto ne@gmail.com	Very good	Good	Good	Good	Yes, okay	It will be beneficial if the presentation could include more working practical instructions.	Flame Photometry
--------------------	-------------------------------	-----------	------	------	------	-----------	--	------------------

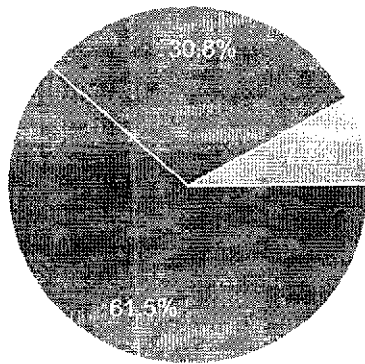
# Feedback Form

13 responses

Publich analytics

Topic relevance

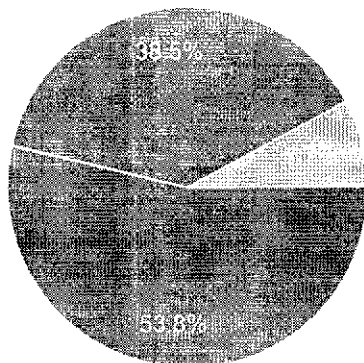
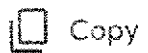
13 responses



- Excellent
- Very good
- Good
- Fair

PPT

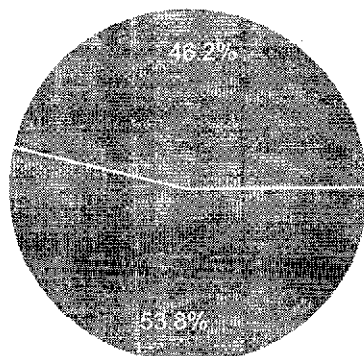
13 responses



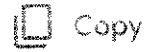
- Very good
- Good
- Okay
- Not satisfactory

Subject knowledge and topic delivery

13 responses

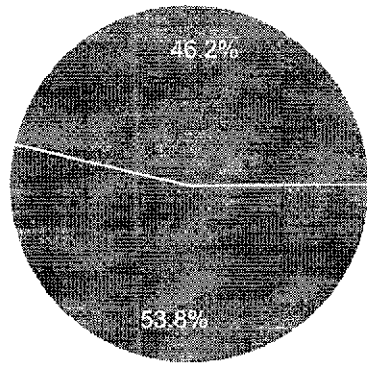


- Very good
- Good
- Fair
- Not satisfactory



### Presentation skill

13 responses

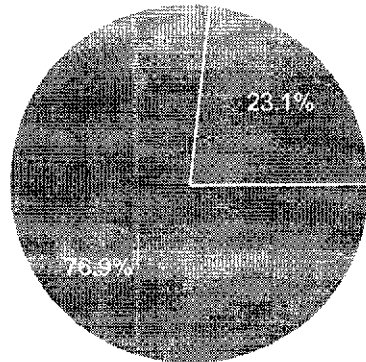


- Very good
- Good
- Fair
- Satisfactory



### Was it beneficial?

13 responses

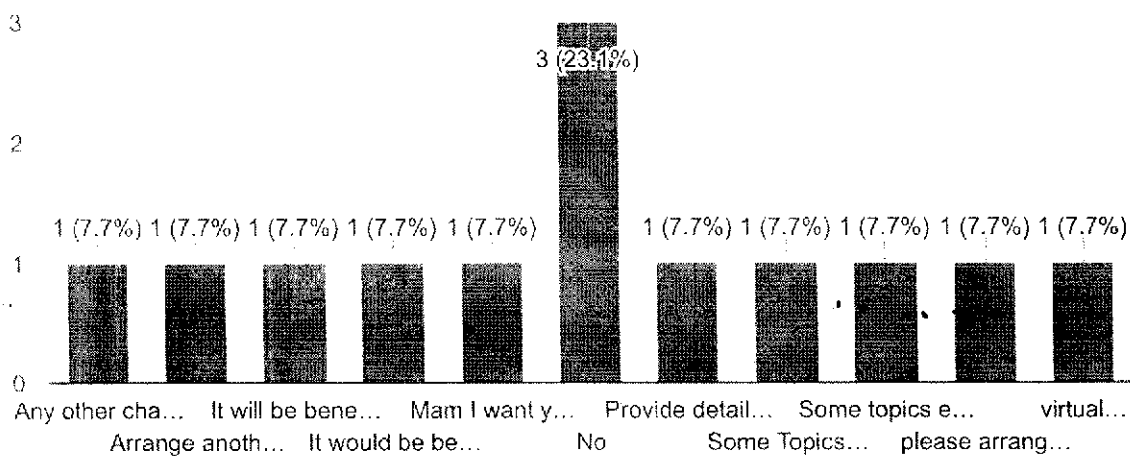


- Yes, very much
- Yes, okay
- Not very much
- Not at all



### Any suggestion?

13 responses



On which topic do you want other course?

13 responses

Any core topic which helps in future

Any of the topics

No

Application of biopharmaceutics and pharmacokinetics.

Practical usage of spectrophotometer

Basic concepts of pharmacology

HPLC

Food technology

Flame Photometry

Flowcytometry

Chromatography

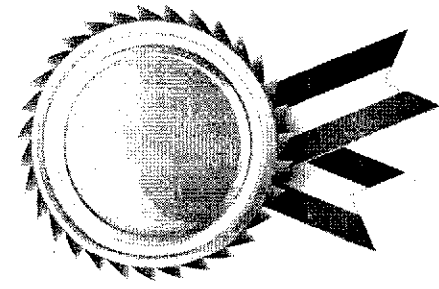
UV Visible

Chromatography, Microscopy

This content is neither created nor endorsed by Google. [Report Abuse](#) - [Terms of Service](#) - [Privacy Policy](#)

Google Forms





**RAMIA**  
**UNIVERSITY**

WWW.RAMIAUNIVERSITY.AC.IN

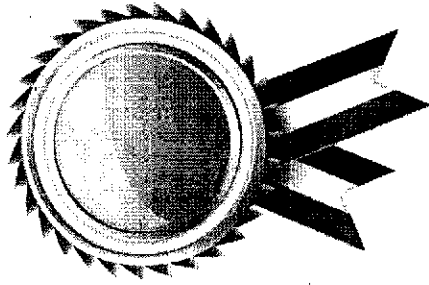
## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. \_\_\_\_\_  
S/o, D/o \_\_\_\_\_ from \_\_\_\_\_  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**CERTIFICATE OF COMPLETION**

This is to certify that Dr./ Mr./ Mrs./ Ms. GOPAL KRISHNA SARSWAT  
S/o, D/o Mr. SATYA MURTI SARSWAT from MSME-TDC (PPDC), AGRA  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.



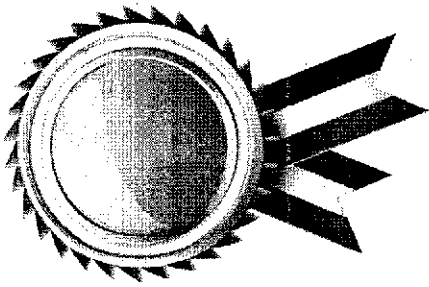
Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology



Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities



Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMA**  
**UNIVERSITY**

www.ramauiversity.ac.in

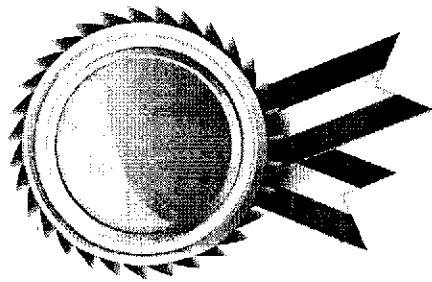
**CERTIFICATE OF COMPLETION**

This is to certify that Dr./ Mr./ Mrs./ Ms. LALTANPUIA RENTHLEI  
S/o, D/o Mr. BIAKZIDINGA RENTHLEI from MIZORAM UNIVERSITY  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMIA**  
**UNIVERSITY**

www.ramauniversity.ac.in

## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. \_\_\_\_\_

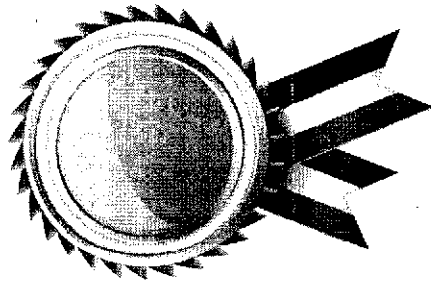
MADHU \_\_\_\_\_

S/o, D/o Mr. DHARMENDRA KUMAR DWIVEDI from MAHARANA PRATAP COLLEGE, KANPUR has successfully completed the online short term course on 'Basics of Spectroscopy' conducted from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMA**  
**UNIVERSITY**



www.ramauniversity.ac.in

**CERTIFICATE OF COMPLETION**

This is to certify that Dr./ Mr./ Mrs./ Ms. POONAM GUPTA  
S/o, D/o Mr. RAKESH GUPTA from RAMA UNIVERSITY, KANPUR  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

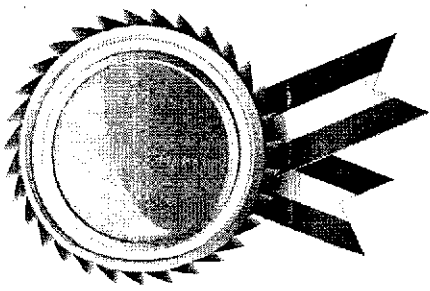
Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities

**RAMIA**  
**UNIVERSITY**



www.ramiauniversity.ac.in



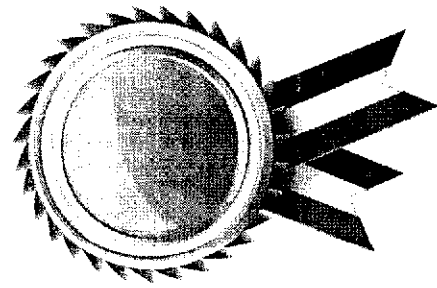
**CERTIFICATE OF COMPLETION**

This is to certify that Dr./ Mr./ Mrs./ Ms. R. VANLALMALSAWMI  
S/o, D/o Mr. R. LALREMRUATA from MIZORAM UNIVERSITY  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



## CERTIFICATE OF COMPLETION


This is to certify that Dr./ Mr./ Mrs./ Ms. \_\_\_\_\_

SHASHI KANT


S/o, D/o \_\_\_\_\_ Lt. Mr. KULDEEP SINGH

from HIGHER SECONDARY SCHOOL, KISHTWAR (J&K)

has successfully completed the online short term course on 'Basics of Spectroscopy' conducted from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities, Faculty of Engineering & Technology.

  
\_\_\_\_\_

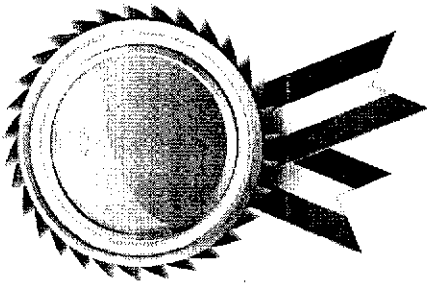
Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

  
\_\_\_\_\_

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

  
\_\_\_\_\_

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



www.ramauniversity.ac.in

## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. SHILPI DEVI  
S/o, D/o Lt. Mr. KAMTA PRASHAD from CSJM UNIVERSITY, KANPUR  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

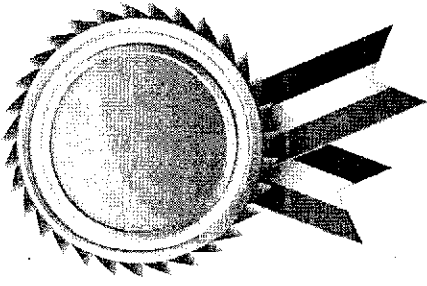
Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities





**RAMA**  
**UNIVERSITY**

WWW.RAMAUUNIVERSITY.AC.IN

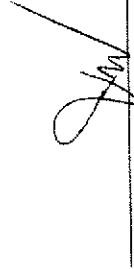


## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. UNNATI NAGARIYA  
S/o, D/o Mr. DEVENDRA KUMAR NAGARIYA from MAHARANA PRATAP COLLEGE, KANPUR  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.



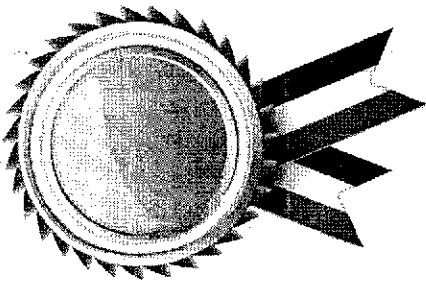
Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology



Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities



Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMIA**  
UNIVERSITY



www.ramauniversity.ac.in

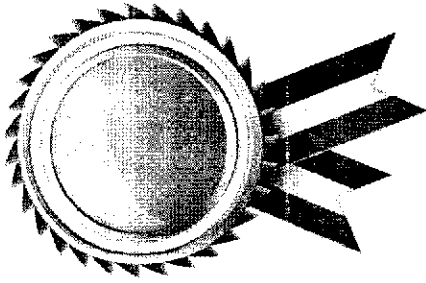
**CERTIFICATE OF COMPLETION**

This is to certify that Dr./ Mr./ Mrs./ Ms. ALKA  
S/o, D/o Mr. RAM PRAKASH from KANPUR INSTITUTE OF TECHNOLOGY  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities


Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities

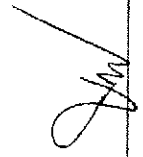



www.ramiauniversity.ac.in

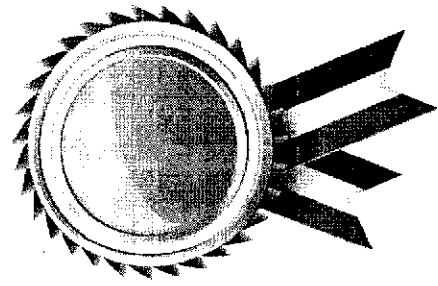
## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. ANKIT SHUKLA  
S/o, D/o Mr. RAM SHRAN SHUKLA from MAHARANA PRATAP COLLEGE, KANPUR  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

  
Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

  
Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

  
Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



www.ramiamuniversity.ac.in

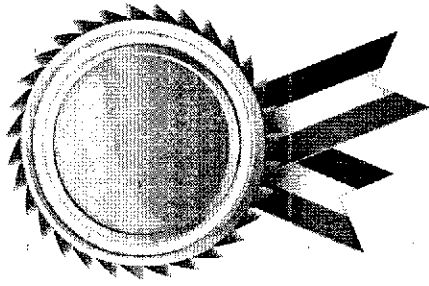
## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. BENJAMIN LALBIAKMAWIA  
S/o, D/o Mr. MS DAWNGLIANA from MIZORAM UNIVERSITY  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMA**  
**UNIVERSITY**

www.ramauiversity.ac.in

## CERTIFICATE OF COMPLETION

This is to certify that Dr./ Mr./ Mrs./ Ms. DIVYA T  
S/o, D/o Mr. THIYAGARAJAN K from TAMIL NADU AGRICULTURAL UNIVERSITY  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

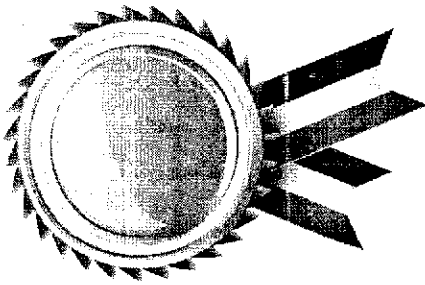
Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities



**RAMIA**  
UNIVERSITY

www.ramiauniversity.ac.in

## CERTIFICATE OF COMPLETION



This is to certify that Dr./ Mr./ Mrs./ Ms. Dr. BHUPEN KUMAR BARUAH  
S/o, D/o Mr. DEBEN CHANDRA BARUAH from JB COLLEGE, JORHAT, ASSAM  
has successfully completed the online short term course on 'Basics of Spectroscopy' conducted  
from 9th June 2020 to 9th July 2020, by Department of Applied Sciences & Humanities,  
Faculty of Engineering & Technology.

Dr. Hari Om Sharan  
Dean, Faculty of Engineering  
& Technology

Mrs. Rati Bajpai  
HOD, Dept. of Applied Sciences  
& Humanities

Dr. Deeksha Ranjan  
Co-ordinator, Dept. of Applied  
Sciences & Humanities