

# *Under The Aegis of Directorate of Higher Education, Haryana*



## *Pt. N.R.S. Govt. College, Rohtak*

### *Certificate Course*



*on*

*``Instrumental Analysis & Techniques in Chemistry``*

*21-27 November 2022*

*Organised by*

*Department of Chemistry*

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# About the Certificate Course

## Pt. N.R.S. Government College, Rohtak

### Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

For B.Sc. Chemistry Hons., Medical, Non-Medical Classes

#### Objective of the Course:

- Understanding of Basic concepts involved in Practical Chemistry
- Learn about Instruments & their calibration in Chemistry Laboratory
- Understanding of Methods of preparation of Solution
- Knowledge about Primary & Secondary Standard Substances
- Different Purification Techniques
- Different Spectroscopic Techniques
- Understand about the Ways to express the Concentration

#### Learning Outcomes of the Course:

- To be able to Prepare solution of different concentration.
- To provide knowledge about all instruments used at different level of Career.
- To create employability to the students in the Structure Determination of Compounds at Industrial Level.
- To understand the procedure for Handling different Instruments.
- To know about the Purity of compounds obtained by organic synthesis .

**Course Duration: 30 Hours**

**Total Marks: 100**

**Theory Marks: 40**

**Practical Marks: 40**

**Internal Marks: 20**

#### Note:

In theory Paper, the Examiner will be required to set a total 40 MCQ's covering entire syllabus. Each question carry equal marks (1 Mark each).

*In Practical Examination*, the Examiner will be required to set 06 Experiment in all. The students have to conduct any two practical's along with Viva-voce on the same.

In Internal assessment, The Students have to give two Presentation from the topics covered during Certificate Course.

#### Grading and the Passing Requirement:

For the Certificate/Add-on course, the passing percentage is 50%. Two tests/presentations are required, and there is no passing minimum for tests/presentations. If a student receives 50% on his final exam, he will have passed the course. If a student does not achieve a minimum of 50% in the exam, he or she must reappear to the course next year. The grade will be assigned to a candidate based on the percentage of marks he or she received in a course.

#### Grade Marks in Percentage

A++	90 & Above
A+	75-89
A	60-74
B	50-59
C	Less than 50

*P Singh*  
Convener  
Department of Chemistry

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## Course Content for both Theory & Practical:

### Unit-I

Introduction: - Laboratory Practices & Instruments in Chemistry Laboratory, 3R's and Safety Disposal of Chemical waste, Safety Symbols in Chemistry Lab, Preventive Measures and First Aid Measures.

### Unit-II

Calibration of Apparatus, Calibration of Instruments, Nature of Substance (Primary & Secondary Standard), Preparation of Standard Solution, Determination of Concentration of Solution by different types of Titrimetric Methods

### Unit-III

Purification Techniques (Simple Distillation, Fractional Distillation, Steam Distillation, Distillation Under Reduced Pressure, Solvent Extraction, Chromatography), Removal of Heavy Metal ions using Dry Husk of Alvera etc.

### Unit-IV

Spectroscopic Techniques, SEM, TEM, XRD etc. for Structure Determination of Compounds, Setting up of Electrochemical Cell and its Application.

### Suggested Reading:

- 1) Vogel, A.I.(1972).Qualitative Inorganic Analysis, Longman.
- 2) Kent, J. A. (ed) (1997),Riegel's Handbook of Industrial Chemistry, CBS Publishers, New Delhi.
- 3) Vowles, P.D.; Connell, D.W. (1980),Experiments in Environmental Chemistry: A Laboratory Manual, Vol.4, Pergamon Series in Environmental Science.
- 4) Gopalan, R.; Anand, A.; Sugumar R.W. (2008),A Laboratory Manual for Environmental Chemistry, I. K. International.
- 5) Willard, H.H.; Merritt, L.L. Jr.; Dean, J.A.; Settle, F.A. Jr.(2004), Instrumental methods of analysis, 7th edition, CBS Publishers.
- 6) Christian, G.D.(2004),Analytical Chemistry, 6th Edition, John Wiley & Sons, New York.
- 7) Skoog, D.A.; Holler, F. J.; Crouch, S.(2006),Principles of Instrumental Analysis,Thomson Brooks/Cole.
- 8) Banwell, C.N. (2006),Fundamentals of Molecular Spectroscopy,Tata McGraw-Hill Education
- 9) Skoog, D. A.; Holler, F. J.; Crouch, S.(2006),Principles of Instrumental Analysis, Cengage Learning.
- 10) Levie, R. de. (2001), How to use Excel in analytical chemistry and in general scientific data analysis, Cambridge Univ. Press.
- 11) Mann, F. G.; Saunders, B. C. (2009), Practical Organic Chemistry, Pearson Education.
- 12) Ahluwalia, V.K.; Dhingra, S. (2004),Comprehensive Practical Organic Chemistry: Qualitative Analysis, University Press.
- 13) Ahluwalia, V.K.; Aggarwal, R.(2004),Comprehensive Practical Organic Chemistry: Preparation and Quantitative Analysis, University Press.
- 14) Furniss, B.S.; Hannaford, A.J.; Smith, P.W.G.; Tatchell, A.R.(2012),Vogel's Textbook of Practical Organic Chemistry, Pearson
- 15) Leonard, J.; Lygo, B.; Procter, G. Advanced Practical Organic Chemistry, CRC Press.

*R Singh*  
Convener  
(Department of Chemistry)

*Seen  
Dhoke*

# *Message by the Principal*



The Certificate Courses in the education system is set to witness path-breaking reform in how students learn, and how teachers teach. The Certificate Course in Chemistry will transform our college students into an equitable and vibrant knowledge. The mission of the Certificate Course is to empower students as per the needs of the 21st century with the aim of preparing well-rounded learners to meet the diverse National and global challenges. The department of chemistry has successfully launched various programs like the Social Outreach Programme along with the current Certificate Course with all these meaningful initiatives. I am sure that all such programmes are more experimental, holistic, and learners centric. I understood the importance of certificate courses as a reformative yet transformative step towards providing quality education for all. I understand that Such a Certificate Course cannot be organized without the whole-hearted commitment and involvement of many people, be it faculty or students. I admire their commitment and congratulate them on the success of the Certificate Course in Chemistry. I express my gratitude & profusely thank to all the chemistry Faculty Members for their effort to encourage academic environment and contributed to the successful completion of this certificate course. We at this institution hope to further sharpen our skills in all aspects by organizing more of such programmes in future.

Principal  
Major Dinesh Saharan

# *Message by the Convener*

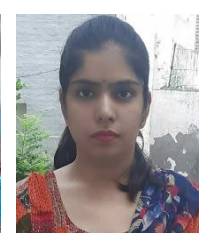


The certificate course in visions is a significant transformation in the entire education system. It envisages education as a Continuum of without any segmentation and focuses on making education more experiment shall Holistic integrated character-building Discovery oriented learner-centered discussion based flexible and above all more joyful. It is indeed my pleasure to inform you that the department of chemistry has achieved more than just the modest target set at the time of its Inception by contributing to the knowledge base in all walks of life. This certificate course is a step towards achieving our vision in becoming a world class academic Institution. The certificate course is meant to inculcate the right values among students to produce socially sensitive citizens. I would like to congratulate the whole chemistry department faculty for their commitment and super drive in organizing this Certificate Course towards strengthening our relationships in knowledge sharing and making this course as a foundation for the growth of new ideas towards a better tomorrow.

Dr. Ravinder Singh

# Faculty Profile

Sr.No.	Designation	Name (Dr./Mr./Mrs./Ms.)
1.	Associate Professor	Ravinder Singh
2.	Associate Professor	Dayawati
3.	Assistant Professor	Suman Bhatti
4.	Assistant Professor	Rinki
5.	Extension Lecturer	Rekha Gautam
6.	Extension Lecturer	Neeraj
7.	Extension Lecturer	Lokesh Kumar
8.	Extension Lecturer	Praveen
9.	Extension Lecturer	Abhishek Dahiya
10.	Extension Lecturer	Poonam
11.	Extension Lecturer	Reena
12.	Extension Lecturer	Anil
13.	Extension Lecturer	Manoj
14.	Extension Lecturer	Kiran Bala
15.	Extension Lecturer	Rinku Lathwal
16.	Extension Lecturer	Jyoti
17.	Extension Lecturer	Bhupender



# Participants of Certificate Course





## ***Notices, Letters/Feed Performa***

***All the Notices are also available in Google Classroom Link created for all participants.***

## Pt. N.R.S. Government College, Rohtak

To  
The Principal,  
Pt. N.R.S. Government College,  
Rohtak

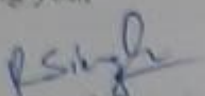
**Subject:** Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

Respected Sir,

The Chemistry department is planning to organize a One Week Certificate Course "Instrumental Analysis & Techniques in Chemistry" to sensitize the students about the Science Techniques from 21-27 November 2022.

Kindly allow for the same.

Thanking you,

  
Department of Chemistry  
(Dr. Ravinder Singh)

Allowed  
@deep  
-

## Pt. N.R.S. Government College, Rohtak

### Notice:

#### **Certificate Course on "Instrumental Analysis & Techniques in Chemistry"**

We have open all the links for some more time due to utmost request from students Click on all link shared below with you.

##### **1st Type of Link for Certificate Course**

1. Google form link for registration in Certificate Course on "Instrumental Analysis & Techniques in Chemistry" from 21-27 November 2022.

<https://forms.gle/jwKD4pBDQ6pJCG9eA>

2. Google form link for Attendance from 21-27 November 2022 along with offline attendance during the Lecture regarding Certificate course

<https://forms.gle/YgYA9yJrSe31faCa9>

3. Google classroom link for Certificate course on "Instrumental Analysis & Techniques in Chemistry" from 21-27 November 2022.

<https://classroom.google.com/c/NTA3NDIzNjcwODIw?cjc=lp45kkt>

##### **2nd type of link for Social outreach programme**

1. Google form link for registration in Social outreach programme.

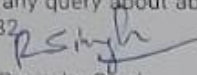
<https://forms.gle/WL8CoYHe212BpQ3d8>

2. Google classroom link for Social outreach programme.

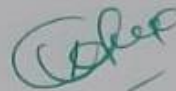
<https://classroom.google.com/c/NTcyNDE2NDk5MTc0?cjc=4qz2bxm>

So, carefully join all programme by clicking all provided link.

For any query about above listed programme. Contact me on 9416561529 or meet me in college in Room no 32

  
Dr. Ravinder Singh

Department of chemistry



**Pt. N.R.S. Government College, Rohtak**

**Notice:**

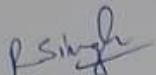
Dated: 20.11.2022

प्रिय विद्यार्थियों,

**Certificate Course on ``Instrumental Analysis & Techniques in Chemistry``** में आपका स्वागत है पंडित नेकी राम शर्मा राजकीय महाविद्यालय, रोहतक के रसायन विभाग द्वारा संचालित कार्यान्वयन पर प्रशिक्षण कार्यक्रम (21-27 नवंबर 2022) में सफलतापूर्वक पंजीकरण करने के लिए बधाई!

सबसे पहले एवं आवश्यक कदम के रूप में, कृपया यूआरएल <https://classroom.google.com/c/NTA3NDIzNjcwODIw?cjc=lp45kkt>

के माध्यम से Google classroom प्लेटफार्म से जुड़ें

  
Department of Chemistry  
(Dr. Ravinder Singh)



**Pt. N.R.S. Government College, Rohtak**

**Notice:**

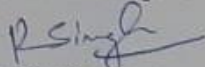
**Certificate Course on "Instrumental Analysis & Techniques in Chemistry"**

1. All the Registered students are required to mark their attendance only during the class in this Google form: <https://forms.gle/YgYA9yJrSe311aCa9>
2. Mark your attendance only once during the class through same Email ID which is used for registration.
3. Multiple Marking of Attendance will be rejected.

It is mandatory for all students.

All students are directed to mark your attendance in this Google form, otherwise your attendance will not be considered.

Please take it urgent.



Dr. Ravinder Singh

Department of Chemistry



**Pt. N.R.S. Government College, Rohtak**

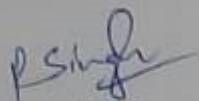
**Notice:**

Dear Participants,

From 21 November 2022, there will be 5 Hour Classes on each day which may or may not include some Online Lecture.

All Participants have to fill the Feedback Performa on 28 November 2022.

All participants have to attempt both Theory & Practical **Test on 28 November, 2022 to get the completion certificate.**



**Department of Chemistry**  
(*Dr. Ravinder Singh*)



**Pt. N.R.S. Government College, Rohtak**

**Notice:**

**Certificate Course on ``Instrumental Analysis & Techniques in Chemistry``**

Your Examination will be on 28 November 2022 which will cover questions from different Lectures which are going to be delivered during the Certificate course in Chemistry on Instrumental Analysis. So, Listen and Note down each and every point of the Lecture.

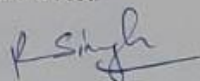
Enjoy, gain and learn a lot from ongoing Certificate Course.

Hopefully, you have note down down all points during Offline Lecture.

Although, there may be some limitations in noting all points. So, We are also sharing the link of video lecture for your convience in preparation of Examination.

We will also share today some remaining Link of video Lecture.

All the best.



Dr. Ravinder Singh  
Department of Chemistry



## Pt. N.R.S. Government College, Rohtak

### Notice:

#### **Certificate Course on "Instrumental Analysis & Techniques in Chemistry"**

All Students will come for 30 Minutes Theory Examination in Room No. 52 at 1:30 p.m on 28 November 2022. (If any change that will be Notified in Google Class Room). Simultaneously, we will provide you the Hard Copy of Question Paper with OMR Sheet to Attempt Question.

**Name of Examination:** 30 Hours Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

**Assessment Schedule: Total Marks:** 100 Marks

**1. Internal Assessment Marks: 20 Marks**

Each Participant have to give a 2-3 Minutes Presentation among the topics covered in Certificate Course on "Instrumental Analysis & Techniques in Chemistry" followed by Practical and Theory Examination on 28 November 2022 from 9:45 a.m. onwards.

**2. Practical Examination: Practical Marks; 40** Do any two among the below given Experiments. Students start doing their Practical Work Just After their Internal Assessment turn is over in Room No. 40.

1. To arrange Set up for separation of Given Liquid Mixture using Simple Distillation
2. To Calibrate the Given Measuring Flask using Distilled water
3. To Extract the Heavy Metal ion from given Solution using Alvera.
4. To standardize the given approx. N/20 KMnO<sub>4</sub> solution using Oxalic Acid solution.
5. To set up a Zn-Cu an Electrochemical Cell.
6. To Perform any 10 Best Practices required during Experimentation in Chemistry Laboratory.

**3. Theory Examination: Theory Marks: 40 Marks.** Total Questions: 40 Questions. Time 30 Minutes (1:30 p.m.-2:00 p.m.)

**Mode of Examination:** Offline Mode through Google Form and Hard Copy in Room No. 52.

**All Students will come with your Mobile Phone with required Data.**

**Question 1 :** Do all the 8 short questions(MCQ's) of 1 marks each covering whole syllabus.

**Question 2: UNIT-I:** Do all 8 short questions(MCQ's) of 1 marks each.

**Question 3: UNIT-I:** Do all 8 short questions(MCQ's) of 1 marks each.

**Question 4: UNIT-I:** Do all 8 short questions(MCQ's) of 1 marks each.

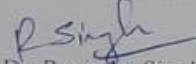
**Question 5: UNIT-I:** Do all 8 short questions(MCQ's) of 1 marks each.

**Grading and the Passing Requirement:**

For the Add-on course, the passing percentage is 50%. Two tests/presentations are required, and there is no passing minimum for tests/presentations. If a student receives 50% on his final exam, he will have passed the course. If a student does not achieve a minimum of 50% in the exam, he or she must reappear to the course next year. The grade will be assigned to a candidate based on the percentage of marks he or she received in a course.

**Grade Marks in Percentage**

A++	90 & Above
A+	75-89
A	60-74
B	50-59
C	Less than 50

  
Dr. Ravinder Singh  
Department of Chemistry





## Pt. N.R.S. Government College, Rohtak

### Notice:

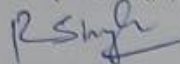
#### Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

Feedback Form of Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

All the Registered students are inform to fill the Feeback Form today immediately (with the same Email ID using during Registration) without any mistake in your Personal Profile i.e. Name, Class, Roll No. etc. (As the same Profile detailed will be printed/filled in the Certificate) by clicking on the below given link:

<https://forms.gle/H2Pu9RntND3x31SPA>

Please take a moment to provide your feedback on the above programme. This questionnaire is covering major areas of the programme. Your valuable feedback shall be used to evaluate this programme and improve design/ delivery methods of present and future programmes of these types ./उपरोक्त कार्यक्रम पर अपनी प्रतिक्रिया देने के लिए कृपया कुछ समय दें। यह पत्रावली कार्यक्रम के प्रमुख क्षेत्रों से संबंधित है और आपकी बहुमूल्य प्रतिपुष्टि का उपयोग इस कार्यक्रम का मूल्यांकन करने और भविष्य में आयोजित किए जाने वाले कार्यक्रमों के डिजाइन/डिलेवरी विधियों में सुधार करने के लिए किया जाएगा।

  
Dr. Ravinder Singh  
Department of chemistry



# List of Registered Students

## Pt. N.R.S. Government College, Rohtak Department of Chemistry

### List of Registered Students in "Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

Sr. No.	Timestamp	Email Address	Name	Class	Roll No	WhatsApp Phone No.
1.	11/20/2022 13:53:49	deepeshy6140@gmail.com	Option 1			
2.	11/20/2022 13:54:15	mr.08singal@gmail.com	Option 1			
3.	11/20/2022 13:56:38	deepikajanghu59@gmail.com	Deepika	B.Sc. Chemistry honours (2nd year)	1211271090023	9728827682
4.	11/20/2022 13:57:30	teamvivekepic720@gmail.com	Vivek	B.Sc 1st year (Non-Medical)	1221271015174	7206867019
5.	11/20/2022 13:57:33	nehapanu70@gmail.com	Neha	Bsc medical 2nd year	1211271030031	8053782076
6.	11/20/2022 13:58:11	yashikarora00@gmail.com	Yashika	Bsc chem hons 3rd year	120127090096	8708919464
7.	11/20/2022 13:58:13	swatishceoras34@gmail.com	swati	bse 2nd chem hons	1211271015100	9813154474
8.	11/20/2022 13:58:59	booranashika@gmail.com	Anshika	BSc Med. (3rd year)	120127030141	9802104705
9.	11/20/2022 13:59:11	solankanjali307@gmail.com	Anjali	B.Sc 2nd (med.)	1211271030109	8295163469
10.	11/20/2022 13:59:13	tanuabhiawa64@gmail.com	Tanu	Bsc medical 3rd year	120127030239	8395947633
11.	11/20/2022 14:00:46	bhanwala28227@gmail.com	Shwami	Bsc non-medical 1st year	1221271015361	9306528227
12.	11/20/2022 14:01:38	sonika00ra18@gmail.com	Sonika	Bsc med 2nd year	1211271030139	7206084690
13.	11/20/2022 14:01:48	vyotipanchal1946@gmail.com	Jyoti	Bsc 1st year medical	1221271030185	9499213411
14.	11/20/2022 14:02:15	vishu Singh7015@gmail.com	Vishal	Bsc med 2nd year	1211271030107	7021598983
15.	11/20/2022 14:02:36	himanshu Singh29102002@gmail.com	Himanshu	B.Sc. Che (Hons) 2nd Year	1211271090073	9817665211
16.	11/20/2022 14:02:39	niruvashisha30@gmail.com	Niru Vashisha	Bsc. NM 1st Year	1221271015357	9992452907
17.	11/20/2022 14:02:48	anshuljvsn2501@gmail.com	Anshul Joon	Bsc. Chemistry honours 3rd year	120127090071	9350094071
18.	11/20/2022 14:02:57	neetuhooda414@gmail.com	Neetu	Bsc chemistry hons 2 year	1211271090084	9896696309
19.	11/20/2022 14:02:58	dhinkharannu211@gmail.com	Tannu	BSC 1st year (N.M.)	1221271015369	7027252901
20.	11/20/2022 14:02:59	rahulabhiawa127@gmail.com	Rahul	Bsc NM 5th sem Pass	120127015403	7082841357
21.	11/20/2022 14:03:13	saksh01k@gmail.com	Sakshu	Bsc Chem hons 2nd year	1211271091029	9518165658
22.	11/20/2022 14:03:16	ajit Singh0407@gmail.com	Harsh	B. S. C physics honours 2nd year	1211271089046	7988303578
23.	11/20/2022 14:03:40	gadhwalokesh2002@gmail.com	Lakesh	B.Sc. Final year (N.M.)	120127015101	9992397716
24.	11/20/2022 14:03:56	1619preeti@gmail.com	Preeti	Bsc chemistry honours 1st year	67	8307873066
25.	11/20/2022 14:03:56	vishalngar646@gmail.com	Vishal	Bsc medical 2nd yr.	1211271015223	9306294670
26.	11/20/2022 14:04:27	vageeshasindhu@gmail.com	Vageesha Sindhu	B.Sc. Chemistry 2nd year	1211271090013	9653330664
27.	11/20/2022 14:04:33	sonamkharwal420@gmail.com	Sonam	Chemistry 2nd year	1211271090021	9466316584
28.	11/20/2022 14:04:35	vyomadher2003@gmail.com	Jyoti	Bsc medical final year	120127030056	9813733715
29.	11/20/2022 14:05:09	sourabhbazzad5@gmail.com	Sourabh	Bsc 1st (Med)	1221271030232	9306023558
30.	11/20/2022 14:05:14	sumedhahankhar@gmail.com	Sumedha	Bsc 2nd chemistry hons	1211271090002	9518480286
31.	11/20/2022 14:05:23	tanujagahlawat@gmail.com	Tanuja	Bsc non-medical 3rd year	120127015040	9817487321
32.	11/20/2022 14:05:53	ohlyankarina@gmail.com	Karina	B.sc chemistry hons second year	1211271090059	8295108242
33.	11/20/2022 14:05:58	ritikyadav26225@gmail.com	Ritik kumar	Bsc non medical	1221271015126	7206064049
34.	11/20/2022 14:06:11	pragatisangwan398@gmail.com	Prajati	Bsc chem hons 3rd year	120127030102	8307284345

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Ravi  
Vishu

35.	11/20/2022 14:06:30	paralshani@gmail.com	Parul	Bsc 1st (NM)	1221271015268	8053652928
36.	11/20/2022 14:06:51	sumitmaan149@gmail.com	Sikandra	Bsc 1st year phy(H)	1221271089035	8053871951
37.	11/20/2022 14:07:10	hemadaliya0@gmail.com	Hema	Bsc 2nd chem hon	1211271090051	8708291382
38.	11/20/2022 14:07:15	ndaairforce76@gmail.com	Lalit	Bsc 3rd year non med	120127015435	9306463762
39.	11/20/2022 14:08:23	bilandemarwal390@gmail.com	Anju	Bsc medical (1st year)	1221271030182	7015433842
40.	11/20/2022 14:09:00	benwalsakshi768@gmail.com	Sakshi	Bsc Physicshonors 1st year	1221271089038	8607042135
41.	11/20/2022 14:09:08	pardeepdolo1830@gmail.com	Enna	Bsci(NM)1st year	1221271015090	8168591683
42.	11/20/2022 14:09:32	sanjay.sharmatailor@gmail.com	Muskan	Bsc 1st pass course(NM)	1221271015057	9050308402
43.	11/20/2022 14:10:34	anujduban937@gmail.com	Anuj	B.sc chem hon 2nd year 3rd sem	12112710944	8221948113
44.	11/20/2022 14:10:44	aab89123@gmail.com	Aryan Balhara	B. Sc. Chemistry Honour 3rd year	120127090072	09729123283
45.	11/20/2022 14:11:20	ravikumar740410@gmail.com	Ravi	bsc(med) 2nd year	1211271030195	9053526256
46.	11/20/2022 14:11:46	drathi180@gmail.com	Deepak Rathice	Bsc non medical final year	120127015327	999687717
47.	11/20/2022 14:12:05	shikshonchra4@gmail.com	Shikha	Bsc 2nd year non medical	1211271015343	9306831898
48.	11/20/2022 14:12:57	khushidagar0003@gmail.com	Khushi	B.Sc. Chemistry honors (second year)	1211271090003	7988160233
49.	11/20/2022 14:13:29	gima1414@gmail.com	Garima	BSC (Chem Hon) 1st year	1221271015267	8930861038
50.	11/20/2022 14:14:09	ritubalhara023@gmail.com	Ritu	Bsc chem hon 1st year	1221271090007	8168672310
51.	11/20/2022 14:14:28	naveensarwara656@gmail.com	Naveen	bsc 3rd year	117	09729645062
52.	11/20/2022 14:14:37	shukshamaan234@gmail.com	Shiksha	Chem. Hon. 2nd year	1211271090007	9992456924
53.	11/20/2022 14:15:33	sawetakhudan@gmail.com	Saweta kumari	Bsc: NM	1221271015374	7056453085
54.	11/20/2022 14:16:12	dahiyaajay024@gmail.com	Bhupender	B.sc chem hon 3rd year	120127090035	8053778115
55.	11/20/2022 14:17:11	ankitamewlwal4@gmail.com	Ankita	Bsc medical 3rd year	120127030130	8307849197
56.	11/22/2022 13:34:58	divyamalik20349@gmail.com	Divya	BSC (chemistry) Hons	1221271090043	9350955808
57.	11/20/2022 14:18:40	shriwanideswal997@gmail.com	Shriwan deswal	Bsc 1st (physics.H)	1221271089053	7988437295
58.	11/20/2022 14:19:12	dearnishajanga@gmail.com	Nisha	Bsc Medical 1 yr	1221271030046	7015666723
59.	11/20/2022 14:19:52	aakashjangir080702@gmail.com	Aakash	Bsc non med. 5th Sem, 3rd year	120127015396	9053194349
60.	11/20/2022 14:20:19	hs2915038@gmail.com	Harsh	Bsc physics honours final year	120127089085	7027545519
61.	11/20/2022 14:20:24	vikashsingh0496@gmail.com	Vikash	Bsc 3rd year non medical	120127015392	7082615610
62.	11/20/2022 14:23:38	prajapatineha9003@gmail.com	Kornal	BSC 1st year Non medical	1221271015209	07206542782
63.	11/20/2022 14:23:43	sahijhamola04@gmail.com	Sahil	Bsc non medical	1221271015382	9588351441
64.	11/20/2022 14:23:49	anjaldeshwal978040@gmail.com	Anjali	Bsc Physics Hons	1211271089055	8278015499
65.	11/20/2022 14:25:21	divyadhull2003@gmail.com	Divya	Bsc medical 1st	1221271030081	8295470653
66.	11/20/2022 14:25:49	anushkapalia05@gmail.com	Anushka	Bsc medical 2nd year	1211271030136	8708336370
67.	11/20/2022 14:28:07	dhankharshikha9@gmail.com	Shikha	BSC non medical 3rd year	120127015201	7015157507
68.	11/20/2022 14:29:58	preetidahiya1685541@gmail.com	Preeti	Bsc Final Year Non-medical	120127015042	8930783231
69.	11/20/2022 14:29:59	rvs55544@gmail.com	Renu	BSC medical	1211271030153	9813162145
70.	11/20/2022 14:33:18	mehraminakshi225@gmail.com	Mitakshi	Bsc 2nd year	1211271030203	9315698922
71.	11/20/2022 14:35:30	jangratanna07@gmail.com	Tanna	Bsc Non-medical 3rd year	120127002515	9729906207
72.	11/20/2022 14:35:32	ekanshi487@gmail.com	Ekanshi	1st year bsc medical	219	7082380207

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Sandhu

73	11/20/2022 14:36:28	ramroopmehra248@gmail.com	Roshni	Bsc second year	1211271030050	7082522860
74	11/20/2022 14:37:04	rnkupandi1972@gmail.com	Tekram	Bsc first year non medical	1221271015312	8950558337
75	11/20/2022 14:38:56	rkramesh8059@gmail.com	Nidhi	B.S.C 1st year	1221271015049	8571982029
76	11/20/2022 14:39:32	kaushtkyogen068@gmail.com	Yogeni	B.Sc nm 2nd year section B	1211271015275	9671232135
77	11/20/2022 14:39:44	tannuablawar66@gmail.com	Tanna	Bsc medical 3rd year	120127030060	7404835450
78	11/20/2022 14:39:53	nareshkumarkidoi@gmail.com	Mayank	Bsc chemistry honrs (1st year)	1221271090058	9588724528
79	11/20/2022 14:40:26	manskadian134@gmail.com	Manshi kumar	Bsc chemistry honrs 3 year	120127090024	7206370592
80	11/20/2022 14:45:27	aanchaldeswal51@gmail.com	Aanchal	B.Sc. Chemistry Hons. 3rd year	120127090094	7988832864
81	11/20/2022 14:51:42	naraadhitya28@gmail.com	Aditya	Bsc chemistry honours ---- 1st	1221271090016	9306449200
82	11/20/2022 14:53:04	amanadvtk11a41@gmail.com	Aman	BSc 1st (NM)	1221271015153	9034477615
83	11/20/2022 14:54:15	dshakuntla045@gmail.com	Vineeta	B.sc physics honrs 1st year	1221271089067	9034426747
84	11/20/2022 14:55:49	vyotichahal622004@gmail.com	Jyoti	B.Sc 1st (Non medical)	1221271015263	9467651058
85	11/20/2022 14:54:53	itsauribtw@gmail.com	Aarya	Bsc 2nd year NM section A	1211271015012	7404325461
86	11/20/2022 14:54:57	annu72030@gmail.com	Annu	B.sc III. Non medical	120127015165	9729998746
87	11/20/2022 14:56:17	rajenderasani623@gmail.com	Muskan	B.Sc.(Hons.) Chemistry 2nd year	1211271090057	9813842039
88	11/20/2022 14:58:04	rupeshjangra05153@gmail.com	Rupesh Kumar	BSc non medical 3rd year	120127015313	9518076584
89	11/20/2022 14:59:15	rohitkhandia4@gmail.com	Rohit	Bsc Non medical (pass course) 3rd year	120127015186	9817776591
90	11/20/2022 15:02:39	kakran76@gmail.com	Ritika	Bsc Chemistry honrs. 2nd year	1211271090033	7404894546
91	11/20/2022 15:19:12	janvi.mnsr@gmail.com	Janvi	B. Sc. Chemistry honrs 3rd year	120127090087	7814313316
92	11/20/2022 15:23:05	nehraachra219181@gmail.com	Neha	Bsc chemistry honours 3rd year	120127090051	9817473033
93	11/20/2022 15:23:41	Ankashsolank144@gmail.com	Ankush Kumar	B.sc Medical 3rd sem	1211271030014	09812122737
94	11/20/2022 15:25:33	anubudhwar8059@gmail.com	Anu devi	Bsc med 2nd year(3rd sem)	1211271030022	8059648481
95	11/20/2022 15:26:32	somakalya2@gmail.com	Sonia	Bsc chemistry honours second year	1211271090016	7496861250
96	11/22/2022 13:32:54	sainjogender12345@gmail.com	Mamta	Bsc. Chemistry honours 2nd year	1211271090015	9350368070
97	11/20/2022 15:27:14	ishikadhonkar24@gmail.com	Ishika	Bsc chemistry honrs 3rd year	120127090088	7494976151
98	11/20/2022 15:35:38	divyadahya0109@gmail.com	Divya dahiya	Bsc 1st (. chemistry Hons)	1221271090021	8708487873
99	11/20/2022 15:35:58	pr96323245@gmail.com	Aditi Triwari	Bsc 2nd year (medical)	121127030245	9518049992
100	11/20/2022 15:49:33	sangwanlakita@gmail.com	Lakita	B.Sc.(Chem Hons) 1st year	1221271090006	9034941772
101	11/20/2022 15:52:07	sonicjangra102002@gmail.com	Sonia	Bsc nm 3rd year	120127015026	7015139242
102	11/20/2022 15:56:01	mohitsolanki03784@gmail.com	mohit	Bsc Non medical [2nd year]	1211271015381	9991216326
103	11/20/2022 16:05:57	maidenlakshi@gmail.com	Nakshi	B SC 2nd (phy II)	1211271089079	8571929680
104	11/20/2022 16:10:48	sifamalik98@gmail.com	Aasifa	B.sc medical, 2nd year, 3rd sem.	1211271030122	7404136224
105	11/20/2022 16:13:44	jangrapnky2003@gmail.com	Pinky	Bsc Non- Medical (III)	120127015006	9350137982
106	11/20/2022 16:17:49	mansidha5555@gmail.com	MANSI	B.sc chemistry honours 2nd year	1211271090038	8816909886
107	11/20/2022 16:23:09	dulalpink100@gmail.com	Pinki	Bsc chemistry honrs 3rd year	120127090064	8307890668
108	11/20/2022 16:25:41	rohit.khanna.0703@gmail.com	Rohit	B.Sc 2nd chem Hons.	1211271090018	9996367908
109	11/20/2022 16:26:43	madhubhaskhar2003@gmail.com	Madhu	B.sc chemistry (honours) 2nd year	1211271090041	9728535722

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*[Handwritten signature]*

110.	11/25/2022 7:40:36	amir123@gmail.com	Amit	BA	1211271015619	7055654321
111	11/20/2022 16:37:15	janrnbhimsbu462@gmail.com	BHUPENDER SINGH	BSC CHEMISTRY (HONS) 1ST YEAR	1221271090022	8307342269
112	11/20/2022 16:39:19	lakshayablawar40@gmail.com	Lakshay ablawar	Bsc non-medical 5th sem	120127015302	7290916187
113	11/20/2022 16:51:20	sourav172002@gmail.com	Sourav	Bsc NM final year	120127015129	8307918298
114	11/20/2022 16:56:17	kushamsharna8859@gmail.com	kusham	bsc. medical 3rd yr	120127030149	09193242910
115	11/20/2022 17:02:51	rohillaabhawna38@gmail.com	Bhawna	Bsc chem hons 2nd year	1211271090054	7206363094
116	11/22/2022 13:08:23	deepanshidahiya2003@gmail.com	Deepanshi	Bsc Chemistry Hons 2nd yr.	1211271090076	7027129113
117	11/20/2022 17:18:02	sdiya2731@gmail.com	Diya	Bsc 1st year medical	1221271030051	9671995097
118	11/20/2022 17:30:16	sangwanameet4@gmail.com	Sunweet	Bsc nm 1st year A	1221271015063	9306379097
119	11/20/2022 17:43:38	vishakani2001im@gmail.com	Divya	B sci 1st year	1221271030138	7015121637
120	11/20/2022 18:14:34	abhivashish74012@gmail.com	Abhinandan	BSc 3rd year non medical sec A	120127015072	9306450220
121	11/20/2022 18:22:41	meenakshishimar1@gmail.com	Meenakshi	B.SC chem hons 2nd year	1211271090008	9729867354
122	11/20/2022 18:58:22	komalsharawat@gmail.com	Komal	B.S.C 1st year (Chemistry Honours)	1221271090046	9728887667
123	11/20/2022 19:16:34	priyasharad3803@gmail.com	Priya	B. Sc. Medical 2nd year	1211271030073	8307677937
124	11/22/2022 21:15:12	nikitaablawar2@gmail.com	Nikita	Bsc Chem Hons 2nd year	1211271090028	8930528067
125	11/20/2022 20:39:34	divydivya684@gmail.com	Divya	Bsc med 1st sem	12112710198	9588586868
126	11/20/2022 21:10:54	chintubecka308@gmail.com	Priyanshu	Bsc (H) chemistry	1211271090017	8059705603
127	11/20/2022 21:16:02	Kodlaandeeppika@gmail.com	Deepika	Bsc 1st (medical)	1221271030122	9812879566
128	11/21/2022 5:01:40	vikramkadyan511@gmail.com	Vikram singh	Bsc (1st) NM	1221271015178	9350132117
129	11/21/2022 5:34:38	sumitpm96@gmail.com	SUMIT Sharma	Bsc. NM ( 5t year	1221271015365	8930947459
130	11/21/2022 5:41:28	vanisharwal2004@gmail.com	Vansha	Bsc chemistry hons 2nd year	1211271090024	9467248251
131	11/21/2022 5:45:49	muskantomari308@gmail.com	MUSKAN	Bsc chemistry hons 1st year	1221271015276	7355873985
132	11/21/2022 5:51:16	veeryash2005@gmail.com	Yashveer	Bsc 1st nm	1221271015233	9350667332
133	11/21/2022 6:01:56	dahyasuhana73@gmail.com	Kirti	Bsc Chemistry Honors 1st year	1221271090074	9306883467
134	11/21/2022 6:46:41	baharatanisha0@gmail.com	Tanisha	Bsc chemistry honours 1st year	1221271090008	7206658743
135	11/21/2022 6:49:45	jakharrenu57@gmail.com	Renu jakhar	Bsc 1st chem ( Hon	1221271090034	8816986857
136	11/21/2022 7:02:49	wolankipari348@gmail.com	Priyanka	Bsc chem Hons 2nd year	1211271090049	7494983420
137	11/21/2022 7:17:10	rashmapanwar1022005@gmail.com	Rashmi	Bsc physics honours	1221271089012	8708129675
138	11/21/2022 7:24:47	abonkhameta28@gmail.com	Neha	Bsc(non-medical) 1st year	1221271015297	9817122683
139	11/21/2022 7:28:18	tw99156@gmail.com	Bhawna	Bsc medical 5th sem	120127030097	9991561074
140	11/21/2022 7:43:51	janprantab74@gmail.com	Ritu	Bsc 2nd year medical	1211271030088	9896344479
141	11/21/2022 8:09:54	krandindia40@gmail.com	Kiran	Bsc 3rd year non medical	120127015097	9817403090
142	11/21/2022 8:13:11	5102anandmurti@gmail.com	Anandmurti	Bsc final year	120127015102	9350304799
143	11/21/2022 8:14:09	pmanta2003@gmail.com	Manta	Bsc medical 1st year	1221271030198	8950035009
144	11/21/2022 8:54:52	rahulkatyal175@gmail.com	RAJUL	B SC PHYSICS HONS 3RD YEAR.	120127089022	9350067458
145	11/21/2022 9:10:20	annamoranannora@gmail.com	Anna	Bsc chem. Hons 2nd year	1211271090020	8950251633
146	11/21/2022 9:19:46	nvarg16koshi@gmail.com	Naveen Garg	Bsc Chemistry Honors 2nd year	120127090079	9350240966
147	11/21/2022 9:19:58	divyagupta1971969@gmail.com	Divya	Bsc chemistry honours final year	120127090084	9518689646

R. Singh

Seen  
Garg

148	11/21/2022 9:21:18	nancyrohila481@gmail.com	Nancy	Bsc medical 1st	1221271030055	8168506582
149	11/21/2022 9:21:29	neerajkhokhar112@gmail.com	Komal	Bsc medical 1st year	1221271030041	7015671140
150	11/21/2022 9:28:32	ritikajangra@gmail.com	Ritika	Bsc 1st physics honors	1221271089059	7015338138
151	11/21/2022 9:28:57	shamsasurbhi89051@gmail.com	Surbhi	Bsc chemistry honors 2nd year	1211271090083	9896527662
152	11/22/2022 12:56:51	abhishekmanjhi1920@gmail.com	Abhishek	Bsc 2nd medical	1211271030208	9541705428
153	11/22/2022 12:57:39	nushardaa93253@gmail.com	Veena	Bsc chemistry honors 2nd year	1211271090043	9306293253
154	11/22/2022 12:57:51	aartisahu9053@gmail.com	Aarti sahu	Bsc chemistry honors 2nd year	1211271090025	9053984677
155	11/22/2022 12:57:54	preeti46@gmail.com	Preeti	Bsc 2nd year chemistry honors	1211271090040	9671195526
156	11/22/2022 12:58:00	kulpreetkaur002@gmail.com	Kulpreet kaur	Bsc chemistry honours 3rd year	120127090090	9096676979
157	11/22/2022 12:58:01	anchadhani-phogat@gmail.com	Sneha	Bsc chem. Hons. 2nd year	1211271090014	8930202112
158	11/22/2022 12:58:43	hathwalsonia@gmail.com	Sonia	Bsc chemistry honors 2nd year	1211271015226	8447514484
159	11/22/2022 12:58:32	balraahi1440@gmail.com	Sahil	Bsc Non-Medical 1st year	1221271015298	8570029907
160	11/22/2022 12:58:32	shaina131000@gmail.com	Shaina	Bsc medical 2nd year	1211271030087	7206651295
161	11/22/2022 12:58:32	nshantbadara4@gmail.com	Priya	Bsc chemistry honors 1st year	1221271090028	8950769561
162	11/22/2022 12:58:33	vikashmal82305@gmail.com	Vikas	Bsc non medical	1221271089074	8597952305
163	11/22/2022 12:58:55	sweta.yadav3003@gmail.com	Sweta	BSC chem honours final yr	120127090034	9991880618
164	11/22/2022 12:59:07	akash6dixhu@gmail.com	Aakash	Bsc Non Medical 1st	1221271015367	7206792905
165	11/22/2022 13:01:06	manishwadhivaitu@gmail.com	Manisha	Bsc 2nd (med)	1211271030017	9992039936
166	11/22/2022 13:01:37	kirandectoria@gmail.com	Kiran	Bsc(NM)	1221271015052	8950264457
167	11/22/2022 13:02:17	kamalsharma7145@gmail.com	Komal	Bsc physics hon 5 th sem	120127089048	7495099668
168	11/22/2022 13:03:34	tannutavcr19@gmail.com	Shivani	B.Sc 1st (NM) Pass course	1221271015051	8222800514
169	11/22/2022 13:05:18	dalalanni47@gmail.com	ANNU	BSC 3rd year NM	120127015063	9812315690
170	11/22/2022 13:06:21	babnasangwan833@gmail.com	Bobita kumar	Bsc medical	120127030013	9518498243
171	11/22/2022 13:06:42	chahundangi@gmail.com	MUSKAN	BSC PASS COURSE SEM 3 YEAR 2	1211271030037	9996675898
172	11/22/2022 13:06:42	sujatamalik20844@gmail.com	Sujata	Bsc med (3rd)	120127030054	9306755932
173	11/22/2022 13:07:49	goyalneha14581@gmail.com	Neha goyal	Bsc chem hon 1st year	1221271090005	9350902698
174	11/22/2022 13:07:51	pawarlakshya98@gmail.com	Lakshya pawar	Bsc 2nd chem honors	1211271090031	8708832841
175	11/22/2022 13:08:27	prachuwach60@gmail.com	Prachi	B sc chemistry honors 1st year	1221271090018	8950662657
176	11/22/2022 13:08:33	manishphogat04@gmail.com	Manisha	Bsc ( Non-medical) 2nd yr	1211271015399	9812714924
177	11/22/2022 13:08:34	khokharanna2003@gmail.com	Annu	Bsc 3rd sem (non-medical)	1211271015280	9812522497
178	11/22/2022 13:08:55	kadyanpriya123@gmail.com	Priya	Bsc non medical	1211271015328	9728246360
179	11/22/2022 13:09:43	anukadran2004@gmail.com	Anu	Bsc 2nd year non medical	1211271015363	8950204925
180	11/22/2022 13:11:35	khushiramalsindhu2326@gmail.com	Khushi sindhu	BSc NM second year	1211271015384	9485689250
181	11/22/2022 13:11:41	yaminidahiya03@gmail.com	Yamini Dahiya	BSC chemistry honours (2 year)	1121271090074	8950258545
182	11/22/2022 13:11:48	purvakataru555@gmail.com	Purva Katara	Bsc Chem. Hons 2nd year	1211271090058	8168014104
183	11/22/2022 13:11:55	aanchalkambo2002@gmail.com	Aanchal	BSC chemistry honors 3rd year	120127090099	9306719279
184	11/22/2022 13:12:55	lalita6soda25@gmail.com	Lalita	Bsc ( non-medical ) 2nd year	1211271015353	9253077402
185	11/22/2022 13:13:08	indom2002@gmail.com	Aman	BSC chem hon 3rd yr	120127090001	8398911260

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186	11/22/2022 13:13:20	kumarinishi107@gmail.com	Rashi kumar	B. sc pass course 2nd year (N.medical)	1211271015209	9306559155
187	11/22/2022 13:14:16	alkirathee25@gmail.com	Alka Devi	Bsc. Medical 1st year	1221271030057	7056847244
188	11/22/2022 13:20:06	happysuhag80@gmail.com	Aanchal Rani	Bsc (med.) 1st year Bsc non medical 2nd yr	1221271030947	8168298932
189	11/22/2022 13:21:51	vibhutigaur2003@gmail.com	Vibhuti Gaur	Bsc.physics hons.(3rd sem)	1211271015392	9350685354
190	11/22/2022 13:22:43	khushi123physics@gmail.com	Khushi	Bsc chemistry hons. 1 years	1211271089010	9518880717
191	11/22/2022 13:24:12	rc0747580@gmail.com	Harsh Budhwar	B.Sc (non medical) 1st year	1221271090052	8901752198
192	11/22/2022 15:21:24	pardeep33376@gmail.com	Pardeep	B.Sc (non medical) 1st year	1221271015217	9467854797
193	11/22/2022 13:33:50	shikshanandal@gmail.com	Shiksha Nandal	Bsc medical 2nd DSC chemistry honors 1st year	1211271030177	+918571099203
194	11/22/2022 13:34:33	lathwalneha485@gmail.com	Kajal	B.sc Chemistry Honours 1st year	1221271090055	9416967803
195	11/22/2022 13:35:45	mohaphogat16060@gmail.com	Muskan	Bsc (med.) 2nd year	1221271090054	8059410058
196	11/22/2022 13:46:12	Yuktanudg@9704@gmail.com	Yukta	B.sc (st non medical)	1211271030242	83077 53958
197	11/22/2022 13:47:33	ajay772lamba@gmail.com	Ajay	Bsc 1st year	1221271015323	8053526337
198	11/22/2022 13:48:47	chahalpk914@gmail.com	Pankaj	Bsc chemistry honours	1221271015394	9034641135
199	11/22/2022 13:52:16	hmsan@422@gmail.com	Preeti	BSC chemistry honours first year	1221271090023	9728248422
200	11/22/2022 13:51:10	harshitawer857@gmail.com	Harsh	Bsc. phy honour first year	1221271090060	9896847135
201	11/22/2022 13:53:02	satsishsharma5103@gmail.com	Satish sharma	Bsc 3rd Year NM	1221271089003	8168315846
202	11/22/2022 14:06:26	babluuab853@gmail.com	Bablu	Bsc chemistry honours 1st year	120127015065	8307949853
203	11/22/2022 14:09:12	kunalduhara558@gmail.com	Kunal	B.Sc Physics honours (2nd year)	1221271090004	9306748021
204	11/22/2022 14:21:50	royalpanchal02235@gmail.com	Rahul	Bsc chemistry hons 2nd year 3rd semester	1211271015075	9896372297
205	11/22/2022 14:28:10	rajani24595@gmail.com	Nakita Jangra SAMEER	Bsc. Non Medical 1st year	1211271090062	7082817442
206	11/22/2022 14:32:03	sc3592873@gmail.com	CHOPRA	Bsc 1st(chem hons)	1221271015366	9034584587
207	11/22/2022 14:35:53	rahulthutor20@gmail.com	Rahul	DSC chem hons 3rd year	1221271090042	8814954200
208	11/22/2022 14:45:01	ankitagupta98126@gmail.com	Ankita	bse 1st year (NM)	120127090014	9812695401
209	11/22/2022 14:46:35	jayhimanchu0309@gmail.com	Jay	Bsc 2nd chemistry honours	1221271015088	7404076210
210	11/22/2022 14:51:56	nikitashereen772@gmail.com	Nikita	Bsc medical 1st	1211271090030	8168924844
211	11/22/2022 14:54:13	nikita.ahlawat1108@gmail.com	Nikita	Bsc non medical 2nd year	1221271030200	9034620448
212	11/22/2022 15:47:10	nishanandal1998@gmail.com	Neha	Bsc chemistry hons final year	1211271015360	9813451189
213	11/22/2022 16:06:10	sachinjakhar209@gmail.com	Sachin	B.sc 2nd	1211271015219	8307817351
214	11/22/2022 16:14:31	nirishpatwal2983@gmail.com	nirish patwal	B.sc 2nd	1211271030201	07027891759
215	11/22/2022 16:56:50	pawanjangra94665@gmail.com	Aarti	Bsc chem II 2nd year	1211271090029	9068690654
216	11/22/2022 18:06:18	priyankunari1412009@gmail.com	Priyanka	HSC Medical 2nd year	1211271030143	8295824995
217	11/22/2022 18:46:53	riturajpa999299@gmail.com	Ritu	Bsc chemistry honours 3rd year	120127090056	9992997556
218	11/22/2022 21:24:33	yogendergalya@gmail.com	Yogender	Bsc chemistry hons 2nd year	120127090029	9350407937
219	11/23/2022 6:35:50	harshitshoch2004@gmail.com	Harshit	Bsc(pass course) 2nd year	1211271015391	8295679375
220	11/23/2022 8:28:27	parveshsoni238@gmail.com	Parvesh	Bsc medical	1211271030216	8570899238
221	11/23/2022 10:30:11	tannuahiya480@gmail.com	Tannu	Bsc med. 2nd year	1211271030156	9817860355
222	11/23/2022 12:54:34	bhuckalravi89@gmail.com	Ravi	Bsc chemistry honours	48	9350087708
223	11/23/2022 12:56:07	nikhiljangra9080@gmail.com	Nikhil Jangra	B.sc chemistry hons	1221271090069	8053294657

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224	11/23/2022 13:33:38	gahlawatpun0@gmail.com	Tannu	Bsc year(medical)	2nd	1211271030098	9671673449
225	11/23/2022 13:35:50	nsaharan095@gmail.com	Neha	Bsc (medical)	2nd year	1211271030086	9729267507
226	11/23/2022 21:25:10	tanulather9@gmail.com	Tannu	Bsc honours	chemistry 2nd year	1211271090080	9040000802
227	11/24/2022 9:02:06	akast118118@gmail.com	Shubham	B.Sc. Physics	honour 1 year	1221271089015	8307918640
228	11/25/2022 12:57:39	sharmaaman41645@gmail.com	Aarti	B SC Medical	2nd year	1211271030095	8053365766
229	11/25/2022 13:35:40	reshmahooda4@gmail.com	Reshma	B. Sc medical	2nd year	1211271030001	8814953552
230	11/27/2022 16:05:28	kanchurohilla295@gmail.com	Anchal	B.Sc. Non-Medical	( 2nd Year )	1211271015149	7404207901

R Singh

Sanjeev



# Summary of the Course

*``Instrumental Analysis & Techniques in  
Chemistry``*

*21-27 November 2022*

**1. Day-1 Inauguration of Certificate Course on ``Instrumental Analysis & Techniques in Chemistry`` by Principal in presence of Chemistry Faculty and Participating Students (21 November 2022)**

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय में प्राचार्य मेजर दिनेश सहारण जी की अध्यक्षता में रसायन विभाग द्वारा "सर्टिफिकेट कोर्स इन केमिस्ट्री आन इंस्ट्रूमेंट एनालिसिस" का शुभारंभ किया गया। यह कोर्स 21 नवंबर से 27 नवंबर तक कुल 30 घंटे के लिए रसायन विभाग द्वारा किया जाएगा इस कोर्स में 200 से अधिक विद्यार्थियों ने अपना पंजीकरण करवाया इस कोर्स में रसायन लैब के विभिन्न वैज्ञानिक तकनीक के बारे में जानकारी देना है। कॉलेज प्राचार्य मेजर दिनेश सहारण जी ने कहा कि इस तरह की गतिविधियों का मुख्य उद्देश्य महाविद्यालय स्तर पर विद्यार्थियों की विज्ञान विषय में रुचि एवं प्रतिभा को उजागर करना है। ऐसी गतिविधियों से विद्यार्थियों में वैज्ञानिक दृष्टिकोण उत्पन्न होता है। 28 नवंबर को इस कोर्स की परीक्षा ली जाएगी जिसमें कम से कम 50% अंक प्राप्त करने वाले विद्यार्थियों को प्रमाण पत्र दिया जाएगा। इस तरह की कोर्स महाविद्यालय में कराने का मुख्य उद्देश्य विद्यार्थियों को लैब एवम् थियरी के बीच के अंतर को कम करना है ताकि लैब कार्य एवम् अनुसंधान में बच्चों की अधिक से अधिक रुचि उत्पन्न हो सके। पहले दिन रसायन विभाग में इस्तेमाल होने वाले विभिन्न उपकरणों की जानकारी तथा उनकी उपयोगिता को समझाया गया। इस अवसर पर संयोजक एवम् विभागाध्यक्ष डॉ रविन्द्र सिंह, नैक कॉर्डिनेटर डॉ देवेन्द्र सिन्धु व समस्त रसायन स्टाफ सदस्य तथा विद्यार्थी उपस्थित रहे।





Rohtak, Haryana, India  
Pt.NRS Govt College, Rohtak, Haryana 124001, India  
Lat 28.897577°  
Long 76.610564°  
21/11/22 01:56 PM



Rohtak, Haryana, India  
Pt.NRS Govt College, Rohtak, Haryana 124001, India  
Lat 28.897577°  
Long 76.610564°  
21/11/22 01:55 PM

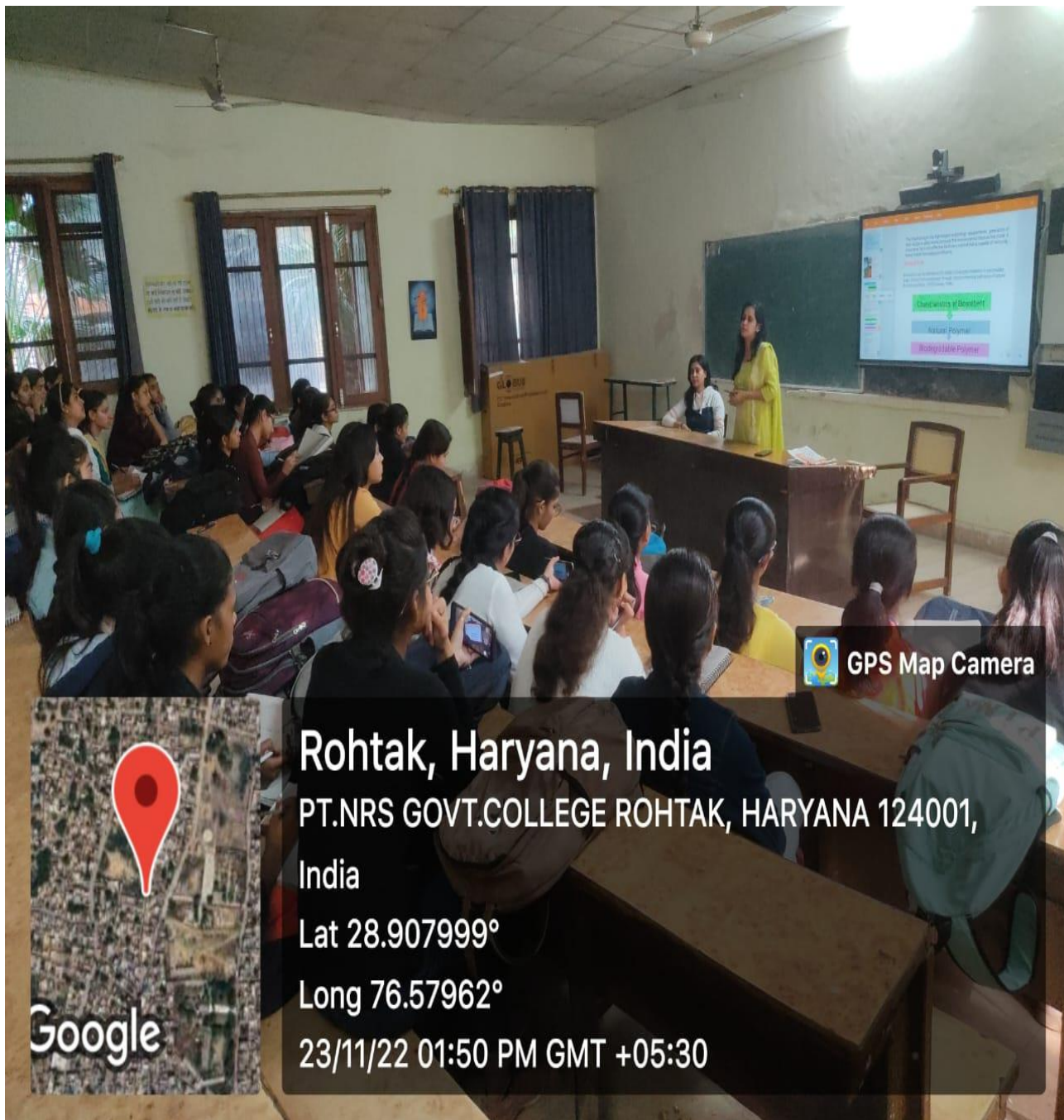
## 2. Day 2 ``Instrumental Analysis & Techniques in Chemistry (22 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के दूसरे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में "सैम, व एक्स आर डी टेक्नीक्स:" विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, डॉ. अभिषेक, डॉ ज्योति, डॉ पूनम, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा विद्यार्थी मौजूद रहे।



### 3. Day 3 ``Instrumental Analysis & Techniques in Chemistry (23 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के तीसरे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में "विभिन्न जल प्रदूषित इलाको मे जल से हैवी मेटल आयन को सूखे अलोविरा, नारियल हसक, पराली, आदि के द्वारा अडरजोरपशन तकनीक से निकाल कर जल को स्वच्छ बनाने:" विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, डॉ. अभिषेक, डॉ रीना, डॉ किरन, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा विद्यार्थी मौजूद रहे।



#### 4. Day 4 ``Instrumental Analysis & Techniques in Chemistry (24 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के चौथे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में "विभिन्न रसायनों की शुद्धता, रसायनों के स्टैंडर्ड सोल्यूशन बनाने की टेक्नीक्स" विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, डॉ. ज्योति, डॉ. पूनम, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा विद्यार्थी मौजूद रहे।



## 5. Day 5 ``Instrumental Analysis & Techniques in Chemistry (25 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के पांचवे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में 'प्यूरिफिकेशन टेक्नीक्स: फिल्टरेशन, पुनः क्रिस्टलन, डिस्टिलेशन, सब्लिमेशन' विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, श्रीमती रेखा गौतम, श्रीमती नीरज, मनोज, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा अन्य विद्यार्थी मौजूद रहे।




## 6. Day 6 ``Instrumental Analysis & Techniques in Chemistry (26 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ऑन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के छठे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में ``स्टैंडर्ड सलूशन का बनाना, प्रेवेंटिव और फर्स्ट ऐड मेजर`` विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, श्रीमती रेखा गौतम, श्रीमती नीरज, मनोज, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा अन्य विद्यार्थी मौजूद रहे।







 GPS Map Camera

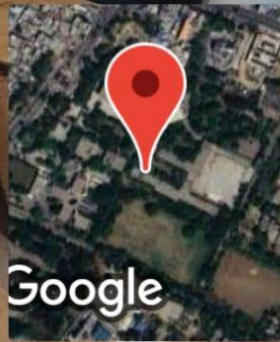
**रोहतक, हरियाणा, भारत**


Pt. N.R.S. Govt College , देव कालोनी, रोहतक, हरियाणा 124001,  
भारत

Lat 28.885182°

Long 76.610004°

26/11/22 02:00 PM GMT +05:30



 GPS Map Camera

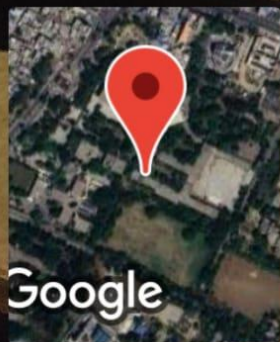
**रोहतक, हरियाणा, भारत**

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भारत

Lat 28.885182°

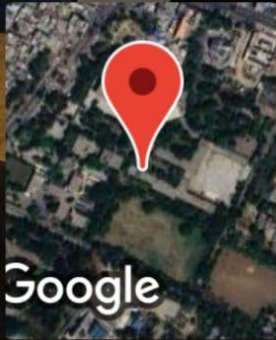
Long 76.610004°

26/11/22 02:17 PM GMT +05:30





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भारत

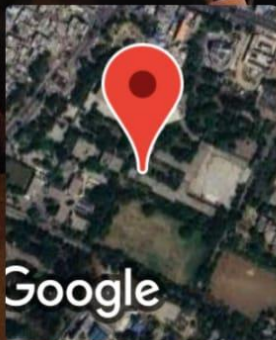
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Long 76.610004°

26/11/22 01:52 PM GMT +05:30



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भारत

Lat 28.885182°

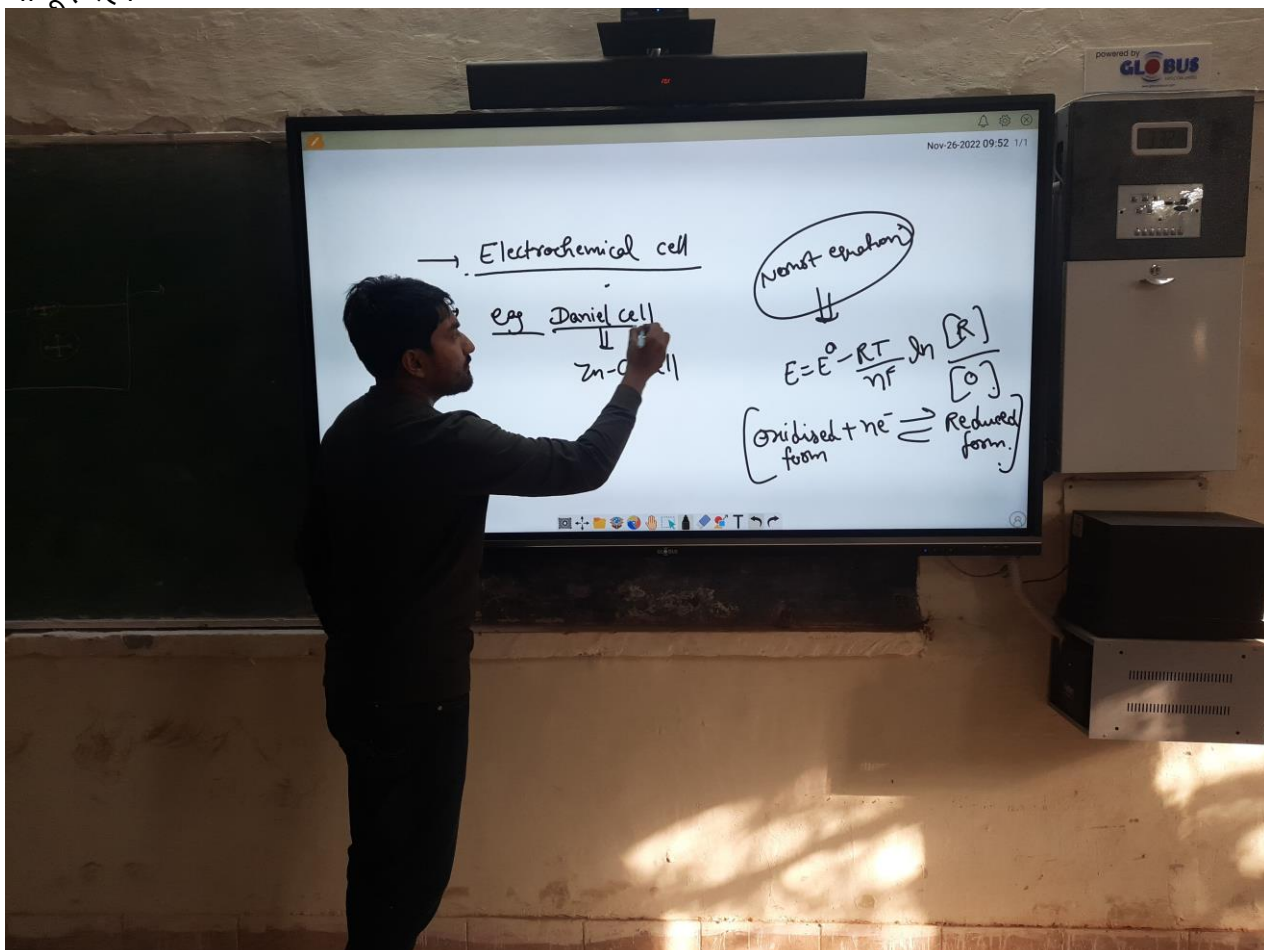
Long 76.610004°

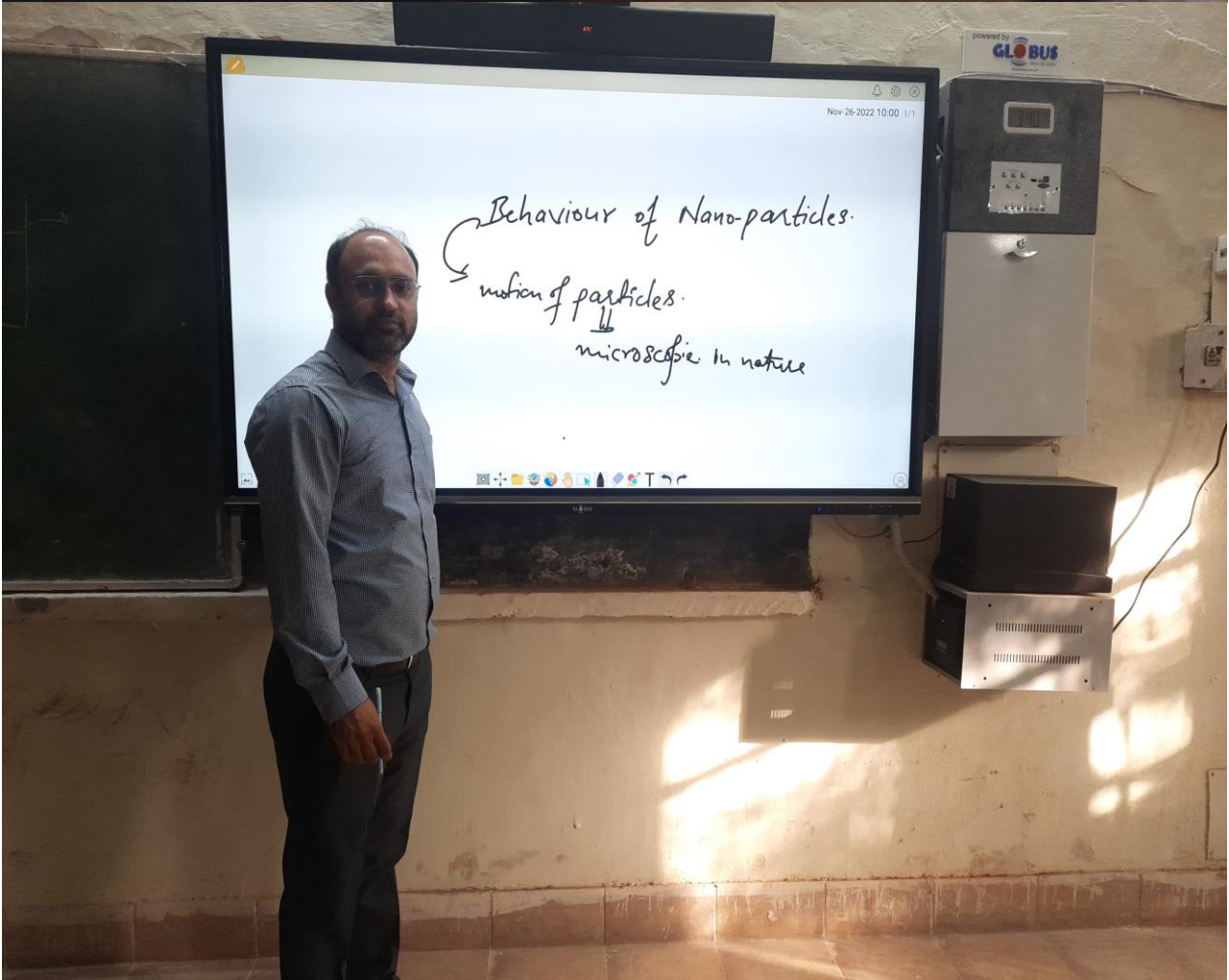
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## 7. Day 7 ``Instrumental Analysis & Techniques in Chemistry (27 November 2022)

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' के सातवे दिन कालेज प्राचार्य मेजर दिनेश सहारन के दिशानिर्देशन व विभागाध्यक्ष डॉ रविन्द्र सिंह की अध्यक्षता में ``एलेक्ट्रोकेमिकल सेल और उसकी एप्लीकेशन, सैम, टैम , एक्स आर डी तकनीक, नैनो पार्टिकल्स का व्यवहार`` विषय पर विद्यार्थियों को जानकारी दी गई। इस अवसर पर विभागाध्यक्ष डॉ रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, श्रीमती रेखा गौतम, श्रीमती नीरज, मनोज, रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा अन्य विद्यार्थी मौजूद रहे।





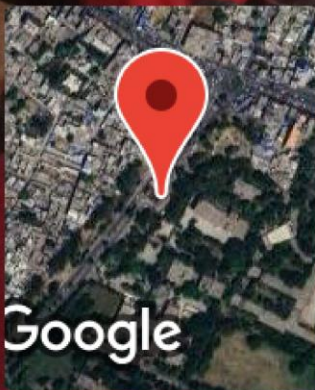
**``Internal Assessment, Practical assessment, Theory Assessment in Certificate Course on  
``Instrumental Analysis & Techniques in Chemistry`` (28 November 2022)**

आज पंडित नेकीराम शर्मा राजकीय महाविद्यालय के रसायन विज्ञान विभाग के द्वारा संचालित 'सर्टिफिकेट कोर्स ओन इंस्ट्रुमेंटल एनालिसिस इन केमिस्ट्री' में विद्यार्थियों का आंकलन किया गया। इस अवसर पर विभागाध्यक्ष डॉ. रविन्द्र सिंह, डॉ. दयावती, डॉ. सुमन भट्टी, डॉ. रिंकी, व रसायन विज्ञान विभाग के अन्य प्राध्यापक तथा अन्य विद्यार्थी मौजूद रहे।





**Rohtak, Haryana, India**  
Pt. NRS Govt College, Rohtak, Haryana  
124001, India  
Lat 28.886286°  
Long 76.608958°  
28/11/22 01:39 PM GMT +05:30



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124001, India  
Lat 28.886286°  
Long 76.608958°  
28/11/22 01:36 PM GMT +05:30



**Rohtak, Haryana, India**

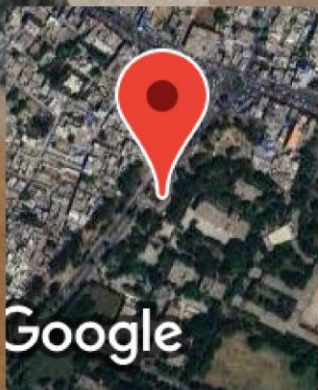
**Pt. NRS Govt College, Rohtak, Haryana**

**124001, India**

**Lat 28.886286°**

**Long 76.608958°**

**28/11/22 01:37 PM GMT +05:30**



**Rohtak, Haryana, India**

**Pt. NRS Govt College, Rohtak, Haryana**

**124001, India**

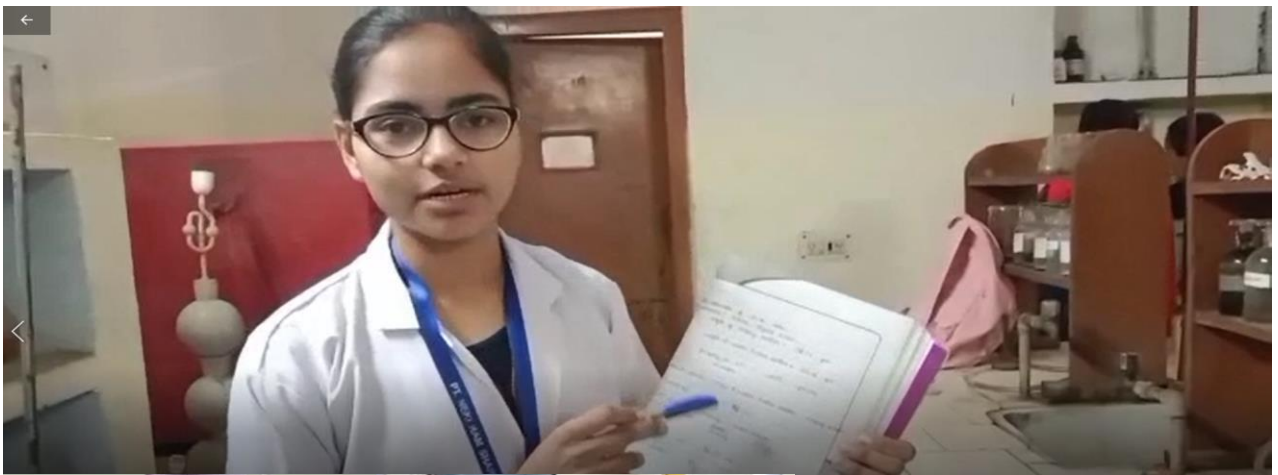
**Lat 28.886286°**

**Long 76.608958°**

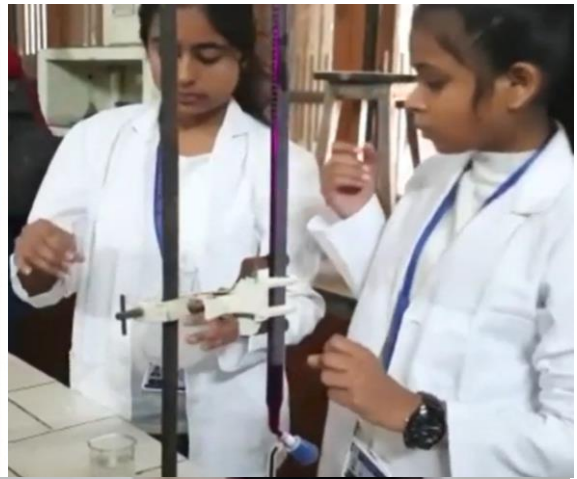
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Pt. N.R.S. Government College, Rohtak

Name of Examination: 30 Hours Certificate Course on "Instrumental Analysis & Techniques in Chemistry"

Total Marks: 40 Marks.

Total Questions: 40 Questions.

Time: 30 Minutes

Each Question Carry One Mark.

1. The following chemical symbol represents:



- a) Oxidising nature of chemical
- b) Corrosive nature of Chemical
- c) Radioactive nature of chemical
- d) Toxic nature of chemical

2. The following chemical symbol represents:



- a) Harmful nature
- b) Narcotic Nature
- c) Low Hazard Nature
- d) Toxic Nature

3. The following chemical symbol represents:



- a) Hot surface
- b) High Temperature
- c) High Voltage
- d) High Current

4. MSDS Stands for:

- a) Material Safety Data Structure
- b) Molecular Safety data Sheet
- c) Material Safety Data Sheet
- d) Matter Safety Data Structure

5. Which of the following is not a component of Universal antidote for treating any poison ingestion:

- a) Common salt
- b) Active Charcoal
- c) Tannic Acid
- d) Magnesium Oxide

6. What should one do in case of irritation in eyes while working in laboratory:

- a) Wash with water and apply Savlon
- b) Wash with water and apply Chloromycetin capsules
- c) Wash with water and cover with cloth
- d) wash with water, close eyes and apply pressure

7. What First aid must be given in case of Bromine spill on Human Body:

- a) Wash with 1% Boric acid solution

*P. Singh*  
(Department of Chemistry)

*see*  
*Blue*

- b) Wash with  $\text{NaHCO}_3$  solution  
c) Wash with 1% acetic acid solution  
d) Wash with 2% ammonia solution
8. Someone who has accidentally swallowed an acidic poison can be treated using which of the following procedure:  
a) Drink plenty of water followed by milk of magnesia or antacid  
b) Drink plenty of water followed by lemon juice  
c) Drink plenty of water followed by 1% acetic acid  
d) None
9. Someone who has accidentally swallowed an alkaline poison can be treated using which of the following procedure:  
a) Drink plenty of water followed by milk of magnesia or antacid  
b) Drink plenty of water followed by lemon juice  
c) Drink plenty of water followed by milk  
d) None
10. How to treat an acidic compound spill on Someone's hand in laboratory?  
a) Wash with 1% Boric acid solution  
b) Wash with  $\text{NaHCO}_3$  solution  
c) Wash with 1% acetic acid solution  
d) Wash with cold saturated  $\text{NaHCO}_3$  solution
11. How many no. of moles present in 8g of  $\text{O}_2$   
a. 0.25mole  
b. 0.3mole  
c. 0.5mole  
d. 0.8mole
12. The equivalent weight of oxalic acid (anhydrous) is  
a. 30  
b. 40  
c. 45  
d. 90
13. What is the unit of molality?  
a. Mole/kg  
b. Unitless  
c. g/ml  
d. mole/l
14. 10% W/W of Sodium Carbonate contains  
a. 100g of water  
b. 10g of water  
c. 90g of water  
d. None of the above
15. Solution is a  
a. Heterogeneous mixture of two or more chemically non-reacting substance  
b. Heterogeneous mixture of two or more chemically reacting substances  
c. Homogeneous mixture of two or more chemically non-reacting substances  
d. Homogeneous mixture of two or more chemically reacting substances
16. Molar mass of  $\text{H}_2\text{SO}_4$  will be  
a. 49  
b. 98  
c. 100  
d. None of the above
17. Normality of a solution containing 5g of  $\text{NaOH}$  in 450ml of solution is  
a. 0.136 N  
b. 0.278 N  
c. 0.215 N  
d. None of the above

R Singh  
(Department of Chemistry)

Handwritten signature in green ink.

18. How many no. of gram equivalent weight present in 71g of HCL
- One
  - Two
  - Three
  - Five
19. Brass is a mix of
- Cu+Zn
  - Cu+Zn+Ni
  - Cu+Sn
  - Cu+Fe
20. Amalgum of Hg with Sodium is
- Liquid in solid
  - Solid in liquid
  - Solid in solid
  - Gas in solid
21. Distribution Law is applicable when two liquids are
- Miscible with each other
  - Partly miscible
  - Immiscible with each other
  - All of above
22. Distribution Law is given by:
- Henry
  - Nernst
  - Ostwald
  - VantHoff
23. The commonly method used to separate naphthalene from benzoic acid is:
- Sublimation
  - Crystallization
  - Distillation
  - Chromatography
24. Which of the following does not influence filtration?
- Temperature
  - Density
  - Viscosity
  - pH
25. Which of the following undergo sublimation?
- Naphthalene
  - Ammonium Chloride
  - Dry Ice
  - All of above
26. Porcelain Chips are used in the distillation flask to prevent:
- Overheating
  - Bumping
  - Uniform boiling
  - None of above
27. The residue left in R.B.F in the process of distillation is:
- Volatile
  - Nonvolatile
  - Both
  - None of above
28. Which process is used in decolorization of brown sugar:
- Absorption
  - Filtration
  - Adsorption
  - Distillation
29. Chemical used for decolorization of brown sugar is:
- Starch
  - Silica gel

*R. Singh*  
(Department of chemistry)

*Sand*  
*Chatter*

- c) Animal charcoal  
d) Calcium chloride
30. Technique used for separation of mixture into its components is:  
a) Chromatography  
b) Simple Distillation  
c) Fractional Distillation  
d) Recrystallization
31. Which of the following process helps in the uptake of heavy metals in bacteria?  
a) Bioaccumulation  
b) Bio augmentation  
c) Bioleaching  
d) Vermicomposting
32. Which of the following is not used to clear-out heavy metals contaminated environment?  
a) Bacteria  
b) Fungi  
c) Algae  
d) H<sub>2</sub>S
33. Which of the following is not a method of heavy metal removal from water?  
a) Adsorption  
b) Chemical precipitation  
c) Biogas  
d) Reverse osmosis
34. Boiling the water can remove heavy metals.  
a) True  
b) False
35. Which of the following heavy metal is found in coffee beverage?  
a) Lead  
b) NaCl  
c) Water  
d) Magnesium
36. SEM gives information about the:-  
(a) Crystalline or amorphous nature of substance.  
(b) Electronic configuration of substance  
(c) Outer surface features of substance  
(d) Inner surface features of substance
37. XRD gives information about the:-  
(a) Crystalline or amorphous nature of substance.  
(b) Electronic configuration of substance  
(c) Outer surface features of substance  
(d) Inner surface features of substance
38. Rare earth metal Europium is used for:-  
(a) Red coloured nanophosphor materials.  
(b) Blue coloured nanophosphor materials  
(c) Green coloured nanophosphor materials.  
(d) Red coloured nanophosphor materials
39. X-rays have:-  
(a) Higher energy than visible radiations.  
(b) lower energy than visible radiations.  
(c) lower energy than infra red radiations.  
(d) Higher energy than microwave radiations.
40. Which of the following is not a application of nanomaterials:-  
(a) Mobile phone screen.  
(b) LEDS.  
(c) Danger signals.  
(d) Classical Bulbs.

*P Singh*  
(Department of Chemistry)

*Sanjeev*  
*Dee*







28	11/28/2022	14-03-13	harshkumar01@gmail.com	Maryank	Bsc chemistry honors 1st year	1211271090058 9388721438	A	A	P	P	P	A	P	P	10	28	12	50	B
29	11/28/2022	14-03-32	marudhyak28@gmail.com	Aditya	Bsc chemistry honors 1st	1221271090016 9306449200	P	P	P	A	A	P	P	P	15	34	27	76	A+
30	11/28/2022	14-03-53	payaljaneral88@gmail.com	Payal	Bsc chem honors 1st	1221271090029 9991823164	P	P	A	P	P	P	P	P	12	24	19	55	B
31	11/28/2022	14-03-59	salhikpar238@gmail.com	Pratyanka	Bsc chem Honors 2nd year	1211271090049 7949983420	A	A	A	P	P	P	P	P	14	32	23	69	A
32	11/28/2022	14-04-24	khushidagar003@gmail.com	Khushi	Bsc chemistry honors (3rd sem)	1211271090003 7988160233	P	P	P	P	P	A	P	P	16	35	27	78	A+
33	11/28/2022	14-04-42	dhishankarna@gmail.com	Karuna	Bsc chemistry honors second year	1211271090059 8295108242	P	P	A	P	P	P	P	P	16	35	29	80	A+
34	11/28/2022	14-05-03	hoozeanshika@gmail.com	Anshika	BSc Med (3rd year)	120127030141 9802104705	A	P	P	P	P	P	P	P	19	39	35	93	A+
35	11/28/2022	14-05-09	slamnasurbhish9051@gmail.com	Surbhi	Bsc chemistry honors 2nd year	1211271090083 9896527662	P	P	P	P	A	P	P	P	15	32	23	70	A
36	11/28/2022	14-05-16	anandhakambo2002@gmail.com	Anandha Kulpreet Kaur	BSc chemistry honors 3rd year	120127090009 9306719279	A	P	A	P	P	P	P	P	15	35	26	76	A+
37	11/28/2022	14-05-28	kulpreetkaur02@gmail.com	Kulpreet Kaur	Bsc chemistry honors 3rd year	120127090090 9996676979	P	P	P	P	A	P	P	P	16	32	23	71	A
38	11/28/2022	14-05-29	prachin64@gmail.com	Prachi	Bsc 2nd year chemistry honors	1211271090040 9671195526	A	P	A	P	P	A	P	P	11	31	21	63	A
39	11/28/2022	14-05-34	pratyankaranil412004@gmail.com	Pratyanka	Bsc Medical 2nd year	1211271030143 8295824995	A	A	P	P	P	P	P	P	13	28	20	61	A
40	11/28/2022	14-05-37	sitamshika98@gmail.com	Anshika Navreen	Bsc medical 2nd year	1211271030122 7404156224	P	A	A	P	P	A	P	P	10	29	21	60	A
41	11/28/2022	14-05-40	nvjyargal6kosh@gmail.com	Garje	Bsc (Chemistry) Honors 3rd yr	120127090007 9350246966	P	P	A	P	A	P	P	P	15	36	27	78	A
42	11/28/2022	14-05-43	russ5544@gmail.com	renu	Bsc medical 2nd year	1211271030153 9813162115	A	A	A	P	P	P	P	P	12	24	18	54	B
43	11/28/2022	14-05-51	anshikajournal2501@gmail.com	Anshika Joon	Bsc chemistry honors 3rd year	120127090001 9350094071	P	P	P	P	P	P	P	P	16	37	25	71	A
44	11/28/2022	14-05-54	yashikajournal@gmail.com	Yashika	Bsc chem honors final year	120127090096 8708919164	P	P	P	P	P	P	P	P	16	36	28	80	A+
45	11/28/2022	14-06-12	divyashigupta1971969@gmail.com	Divya	Bsc chem honors 3rd year	120127090084 9518689646	P	P	P	P	P	P	P	P	18	36	22	86	A+
46	11/28/2022	14-06-21	shammanand1615@gmail.com	Aarti	B sc Medical 2nd year	1211271030095 805365766	A	A	P	A	A	P	P	P	11	26	13	81	B
47	11/28/2022	14-07-13	hadiwalibevra@gmail.com	Sonu	Bsc chemistry honors 2nd year	1211271015236 844741484	P	P	P	P	P	A	P	P	15	34	23	71	A
48	11/28/2022	14-07-45	jyeshthakarani23456@gmail.com	Mandira	Bsc Chemistry honors 2nd year	1211271090015 9350568070	P	P	P	P	P	A	P	P	11	31	21	60	A

P Singh

Prachi

Prachi

Prachi

Page 3 of 4





Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

10. The role of religion has increased in the past few decades because of a revival of religious belief. This is not true. It is very true. Very little extent/degree of use. Large extent/degree of use. Moderate. Little extent/degree of use. Very little extent/degree of use.

Mark only one oval  
 Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

11. Contributions to learning should be limited.  
 It would be better to have more contributions to learning. Contributions should be limited. Contributions should not be limited. Contributions should be encouraged. Contributions should be encouraged.

Mark only one oval  
 Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

12. Global Teaching Learning Processes should be used in all courses. There is no need for global teaching learning processes. There is a need for global teaching learning processes. There is a need for global teaching learning processes. There is a need for global teaching learning processes.

Mark only one oval  
 Excellent/very good  
 Very Good/good  
 Satisfactory/fair  
 Fair/poor  
 Poor/bad

14. Discussion Forum Chats enhance your learning. Large extent/degree of use. Little extent/degree of use. Moderate. Very little extent/degree of use. Very large extent/degree of use.

Mark only one oval  
 Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

15. Live lectures stimulated your interests and enhanced your understanding. Very little extent/degree of use. Large extent/degree of use. Moderate. Very little extent/degree of use. Very large extent/degree of use.

Mark only one oval  
 Very large extent/degree of use  
 Large extent/degree of use  
 Moderate  
 Little extent/degree of use  
 Very little extent/degree of use

9. (1) To what extent do you find the present programme relevant to your understanding of the international business environment? Please tick the most appropriate box. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

10.

(1) To what extent do you find the present programme relevant to your understanding of the international business environment? Please tick the most appropriate box. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

11.

8. Contribution to Learning (10 marks)

To what extent do you find the Certificate Course, relevant to your level of knowledge? Please tick the most appropriate response. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

12.

(1) Improvement in your level of knowledge after attending the programme. Please tick the most appropriate response. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

13.

C. About Teaching-Learning Process (10 marks) (10 marks) Please tick the most appropriate response. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Excellent (4)
- Very Good (3)
- Satisfactory (2)
- Fair (1)
- Poor (0)

14.

(1) Discussion Forum (10 marks) (10 marks) Please tick the most appropriate response. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

15.

(1) Live lecture simulated your interests and enhanced your understanding of the course. Please tick the most appropriate response. Very large extent (4), Large extent (3), Moderate (2), Little extent (1), Very little extent (0)

Mark only one oval

- Very large extent (4)
- Large extent (3)
- Moderate (2)
- Little extent (1)
- Very little extent (0)

3. About Technology (कौशल) के बारे में (Please tick the most appropriate scale from each column for the best)

Mark any one box

- Excellent की उच्च
- Very Good बहुत अच्छा
- Satisfactory (संतोषजनक)
- Fair (ठीक)
- Poor (दुर्गम)

4. About programme (कॉर्सेज) के बारे में (Please tick the most appropriate scale from each column for the best)

Mark any one box

- Excellent की उच्च
- Very Good बहुत अच्छा
- Satisfactory (संतोषजनक)
- Fair (ठीक)
- Poor (दुर्गम)

5. Do you find any difficulty in navigation (किसी सामग्री को खोजने में कोई कठिनाई है)

Mark any one box

- Yes (हाँ)
- No (नहीं)

6. Any suggestions/comments you would like to offer on the programme (किसी सुझाव/टिप्पणी के लिए हमें बताएं)

7. To what extent they were clearly in instructions while registering (निर्देशन के समय निर्देशों में कितना स्पष्ट रहेंगे)

Mark any one box

- Very large extent बहुत बड़ी
- Large extent बड़ी
- Neutral (निरपेक्ष)
- Little extent थोड़ी बहुत
- Very little extent बहुत कम

8. To what extent was the technological design suitable (सुविधाजनक डिजाइन का स्तर)

Mark any one box

- Very large extent बहुत बड़ी
- Large extent बड़ी
- Neutral (निरपेक्ष)
- Little extent थोड़ी बहुत
- Very little extent बहुत कम

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